A new law on strikes?

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BUSINESS WEEK

A McGRAW-HILL PUBLICATION FIFTY CENTS OCT. 24, 1959

New York banker scouts Main Street for deposits —and customers—in a time of tight money.
(Page 46)

RIOT in the nursery

Now you're getting brighter colors in cloth, thanks to one of the most potent *bleaches* known to science—hydrogen peroxide.

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NEW YORK

GENERAL BUSINESS

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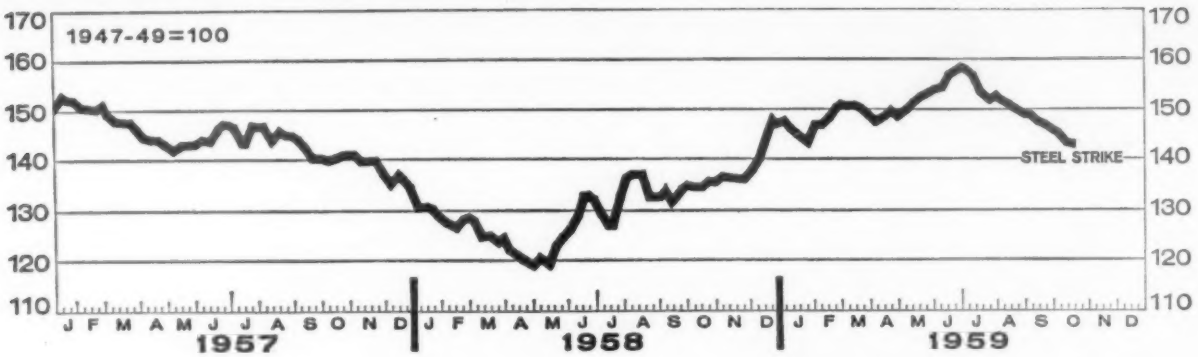
BUSINESS WEEK is published weekly by McGraw-Hill Publishing Co., Inc., 330 W. 42nd St., N. Y. 36, N. Y. Second Class Postage Paid at N. Y. 1, N. Y., and at Albany, N. Y. Subscriptions $6 a year in U. S. A. Canadian and foreign rates on request.

NUMBER 1573

FIGURES of the WEEK



	1953-55 Average	Year Ago	Month Ago	Week Ago	§ Latest Week
BUSINESS WEEK INDEX (chart)	**133.3**	**136.2**	**147.5**	**144.0r**	**143.5***
PRODUCTION					
Steel ingot (thous. of tons)	2,032	2,026	362	368r	**371**
Automobiles	125,553	45,387	62,716	118,793r	**135,312**
Engineering const. awards (Eng. News-Rec. 4-wk. daily av. in thous.)	$52,412	$56,181	$66,873	$55,204	**$48,966**
Electric power (millions of kilowatt-hours)	10,819	12,048	12,779	13,086	**12,861**
Crude oil and condensate (daily av., thous. of bbls.)	6,536	6,893	6,823	6,809r	**6,839**
Bituminous coal (daily av., thous. of tons)	1,455	1,495	1,280	1,267r	**1,286**
Paperboard (tons)	247,488	314,445	327,749	331,221	**332,662**
TRADE					
Carloadings: mfrs., miscellaneous and l.c.l. (daily av., thous. of cars)	70	64	54	59	**57**
Carloadings: all others (daily av., thous. of cars)	47	51	34	36	**36**
Department store sales index (1947-49 = 100, not seasonally adjusted)	121	147	133	143r	**151**
Business failures (Dun & Bradstreet, number)	198	288	264	274	**252**
PRICES					
Industrial raw materials, daily index (BLS, 1947-49 = 100)	89.2	89.3	93.8	93.5	**93.9**
Foodstuffs, daily index (BLS, 1947-49 = 100)	90.5	83.1	76.2	75.2	**74.8**
Print cloth (spot and nearby, yd.)	19.8¢	17.6¢	19.5¢	19.7¢	**20.0¢**
Finished steel, index (BLS, 1947-49 = 100)	143.9	186.2	186.7	186.8	**186.8**
Scrap steel composite (Iron Age, ton)	$36.10	$42.83	$42.50	$44.50	**$45.17**
Copper (electrolytic, delivered price, E & MJ, lb.)	32.394¢	27.075¢	31.410¢	32.600¢	**32.870¢**
Wheat (No. 2, hard and dark hard winter, Kansas City, bu.)	$2.34	$2.01	$2.00	$2.04	**$2.05**
Cotton, daily price (middling, 1 in., 14 designated markets, lb.)	34.57¢	34.74¢	31.77¢	31.68¢	**31.64¢**
Wool tops (Boston, lb.)	$1.96	$1.60	$1.92	$1.87	**$1.83**
FINANCE					
500 stocks composite, price index (S&P's, 1941-43 = 100)	31.64	51.20	55.75	57.00	**56.88**
Medium grade corporate bond yield (Baa issues, Moody's)	3.59%	4.92%	5.21%	5.28%	**5.29%**
Prime commercial paper, 4 to 6 months, N. Y. City (prevailing rate)	2–2⅛%	3¼%	4¾%	4¾%	**4¾%**
BANKING (Millions of Dollars)					
Demand deposits adjusted, reporting member banks	‡‡	60,329	61,133	60,051 r	**60,852**
Total loans and investments, reporting member banks	‡‡	102,418	104,137	103,026 r	**102,842**
Commercial, industrial, and agricultural loans, reporting member banks	‡‡	31,507	30,270	30,445 r	**30,656**
U. S. gov't guaranteed obligations held, reporting member banks	‡‡	34,834	28,891	27,665 r	**27,461**
Total federal reserve credit outstanding	26,424	26,925	28,834	28,623	**28,667**

MONTHLY FIGURES OF THE WEEK		1953-55 Average	Year Ago	Month Ago	Latest Month
Cost of living (U. S. Dept. of Labor BLS, 1947-49=100)	**Sept.**	114.6	123.7	124.8	**125.2**
Personal income (seasonally adjusted, in billions)	**Sept**	$296.1	$364.2	$380.0	**$379.6**
Farm income (seasonally adjusted, in billions)	**Sept**	$ 16.0	$18.1	$13.7	**$13.4**
Private expenditures for new construction (in millions)	**Sept**	$2,390	$3,157	$3,642	**$3,533**
Public expenditures for new construction (in millions)	**Sept**	$ 980	$1,588	$1,649	**$1,564**
Domestic air cargo (express and freight, millions of ton miles, A.T.A.)	**Aug**	22.5	36.7	36.6	**38.0**

* *Preliminary, week ended October 17, 1959.*
r *Revised.*

†† *Not available. Series revised.*
§ *Date for 'Latest Week' on each series on request.*

THE PICTURES—Cover—Grant Compton; 25, 26, 27—Herb Kratovil; 28—(top lt. & 2 rt.) Herb Kratovil; (bot. lt.) WW; 29—Herb Kratovil; 46, 47—Grant Compton; 67—(top) Norman W. Evans for Aerojet-General Corp.; (bot. 2) Thiokol; 68—(top) Thiokol, (bot.) Norman W. Evans for Aerojet-General Corp.; 76—Chicago & Northwestern Railway; 78, 79—Grant Compton; 93, 94, 95, 97—Grant Compton; 99—Pictorial Parade; 105—Central Press from Pictorial Parade; 107—UPI; 108—WW; 113—Jack Fuller; 116—Eastern Publishers Service; 124—(top) Kroger Co., (bot.) Herb Kratovil; 125—Herb Kratovil; 161—Don Newlands; 162—(top) Canada Steamship Lines, (bot.) Imperial Oil Limited; 168—Har-Mac Inc.

B.F.Goodrich

Coal travels nonstop on rubber turnpike

B. F. Goodrich improvements in rubber brought extra savings

COAL used to be hauled by trucks from a Kentucky mine to river barges. But trucks couldn't deliver it fast enough, were sometimes slowed down or stopped completely by bad weather. Engineers knew conveyor belts would be faster, would keep the coal flowing at a steady rate. But they wanted to be sure there'd be no costly shutdowns for repairs.

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The belts were installed, and after more than a year hadn't caused a minute of downtime. One big reason is that this conveyor uses the B.F.Goodrich "turnover" system. The belt turns upside down after dumping the coal, then turns over again before picking up another load. This way the coal-carrying side of the belt never touches the rollers, so there's no chance of anything sticking to the metal parts or to the belt, and causing wear.

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BUSINESS WEEK • OCTOBER 24, 1959 • NUMBER 1573

Published weekly by McGraw-Hill Publishing Company, Inc., James H. McGraw (1860-1948), Founder. **PUBLICATION OFFICE:** 330 West 42nd Street, N. Y. 36, N. Y. See panel below for directions regarding subscriptions or change of address. **EXECUTIVE, EDITORIAL, CIRCULATION and ADVERTISING OFFICES:** McGraw-Hill Building, 330 West 42nd Street, N. Y. 36, N. Y. Donald C. McGraw, President; Joseph A. Gerardi, Executive Vice President; L. Keith Goodrich, Vice President and Treasurer; John J. Cooke, Secretary. Officers of the Publications Division: Nelson L. Bond, President; John R. Callaham, Vice President and Editorial Director; Joseph H. Allen, Vice President and Director of Advertising Sales; A. R. Venezian, Vice President and Circulation Coordinator. Subscriptions to Business Week are solicited only from management men in business and industry. **POSITION AND COMPANY CONNECTION MUST BE INDICATED ON SUBSCRIPTION ORDERS. SEND TO ADDRESS SHOWN IN BOX BELOW.** United States subscription rates for individuals in the field of the publication, $6 per year, single copies 50¢. Canadian and foreign rates on request. Second class postage paid at N. Y. 1, N. Y. and at Albany, N. Y. Printed in U. S. A.

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READERS REPORT

Innocent Stockholders?

Dear Sir:

There is no intention to pick on BUSINESS WEEK for using the phrase "innocent stockholders" in reference to the du Pont case. The phrase was most likely suggested to Judge La Buy by the defendants, representatives of the "innocent stockholders." But the point overlooked by BW in its editorial [BW—Oct.10'59,p184] and others accepting the "innocent stockholder" theme, is the question: How innocent are those stockholders?

Have these stockholders been unaware that their companies have been in an antitrust suit since 1949? It would appear more realistic to say these stockholders assumed the risks involved and now should accept the consequences. Surely these "innocent stockholders" are aware of the hazards of common stock ownership. . . .

It has not been the public policy, as set out in the various federal statutes . . . to protect the investor from legal or economic adversities, but rather from fraud and deception resulting primarily from lack of information.

The risk that the government could win the case was known to these stockholders or their representatives. These "innocent stockholders" took the chance. They lost. Or is what is bad for General Motors (and du Pont) stockholders bad for the country?

SANTO J. PULLARA
INSTRUCTOR, FINANCE
COLLEGE OF BUSINESS ADMINISTRATION
SYRACUSE UNIVERSITY
SYRACUSE, N. Y.

Headed for Trouble?

Dear Sir:

Do you really think the driver of the Falcon in the middle lane of your October 3 cover will retain his satisfied smile? It looks to me as if he is heading for trouble if he continues on his present course in apparent violation of any rules of the road that I ever heard of. . . .

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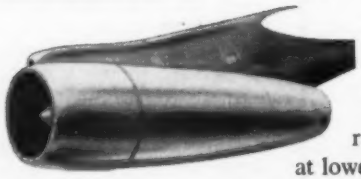
EAST NORWALK, CONN.

• Reader Green clearly knows his road rules. This is a case of artistic license.



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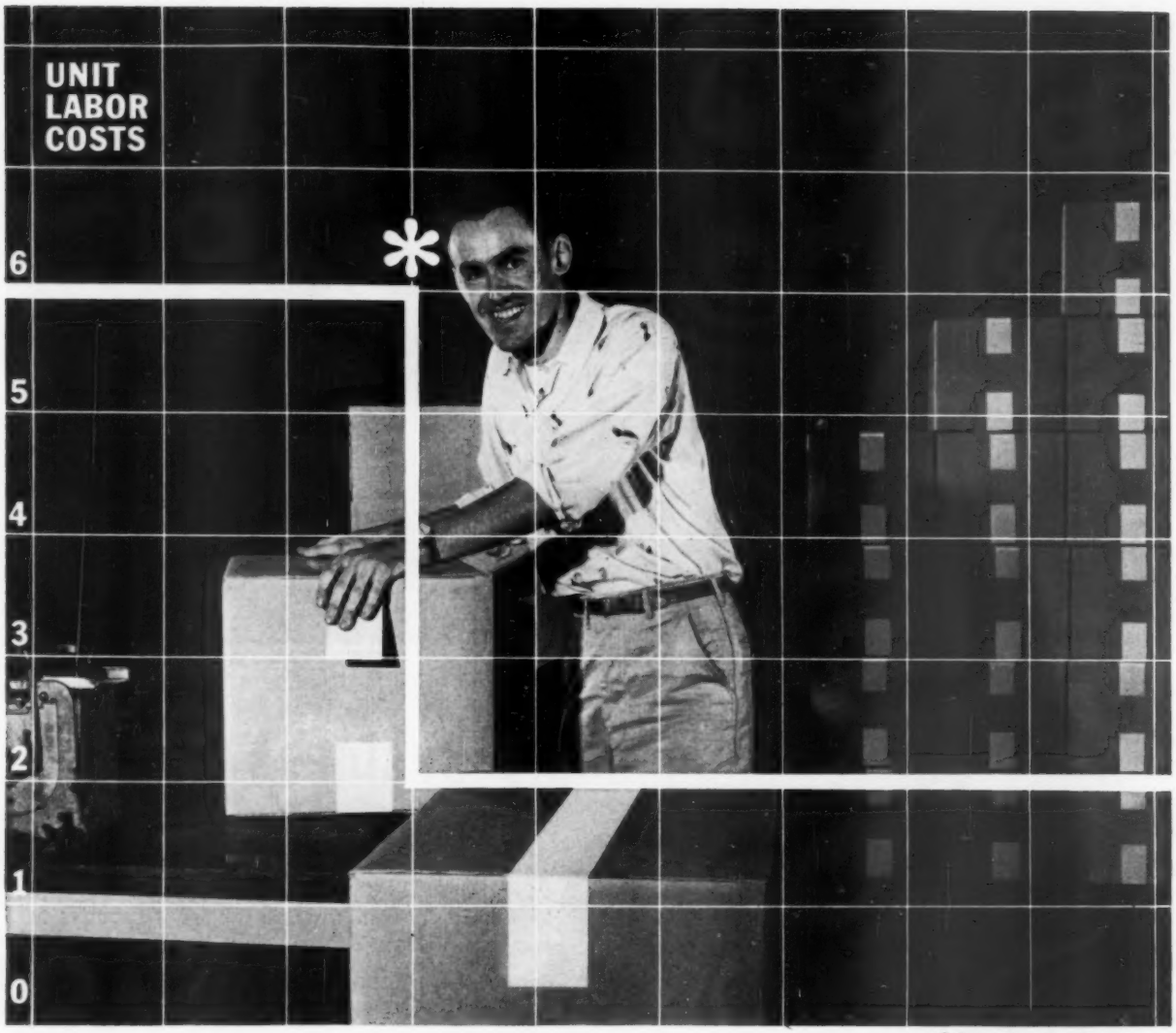

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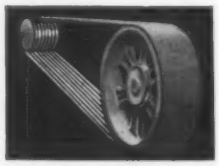

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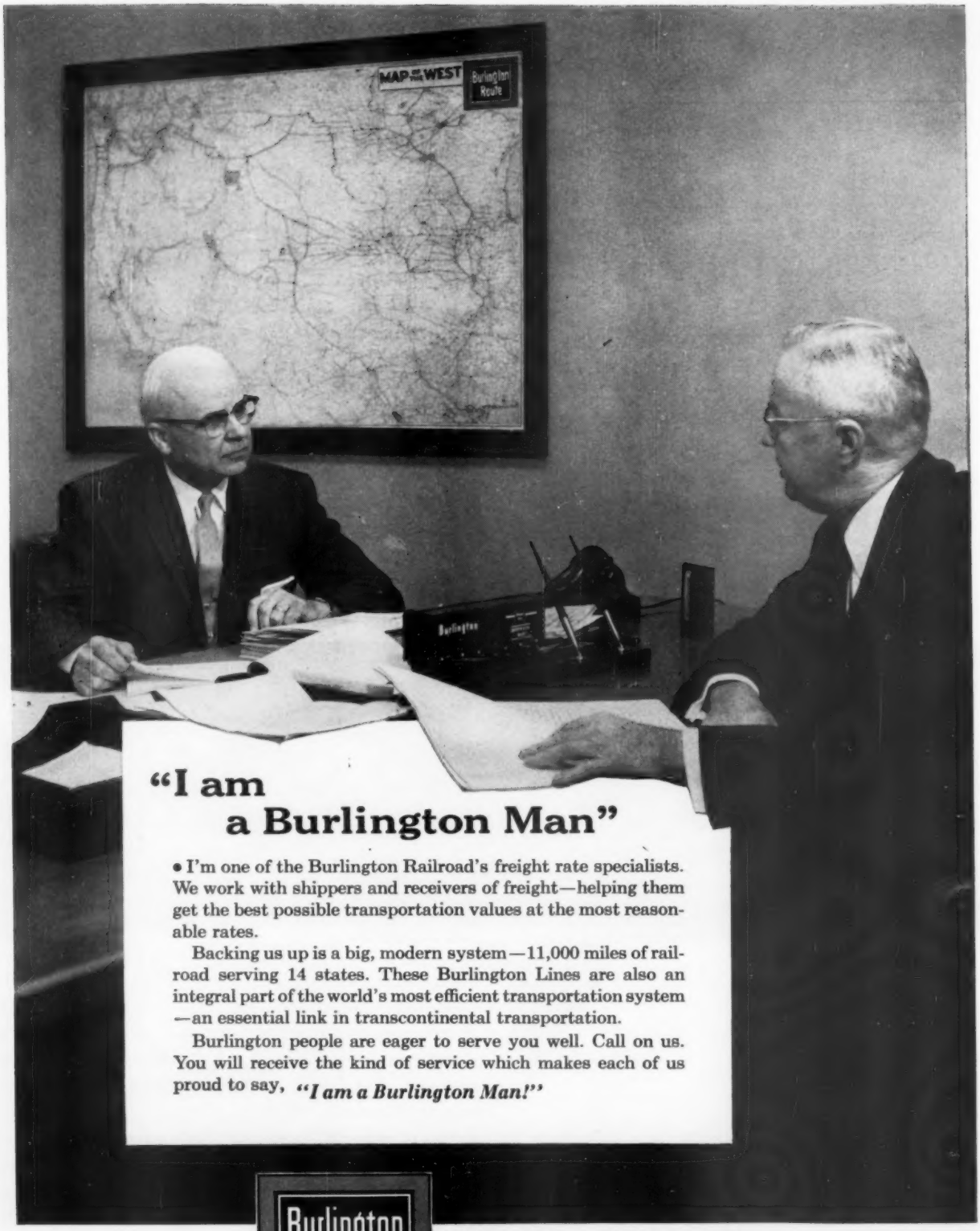
Not only in art and nature is beauty found—it is also characteristic of a perfectly-designed machine. Like all Olivetti products, the Divisumma 24 is pleasing to the eye: its appearance reflects the speed and efficiency of its simplified operation, so well suited to the needs of modern business. Automatic constant retention, automatic re-entry of intermediate results and a unique "memory" make it especially useful in handling combined calculations, while the tape is a permanent record of all operations. And so logical is the Divisumma keyboard that no operator training is required. Olivetti Corporation of America, 375 Park Avenue, New York City 22, branches or dealers in all principal cities.



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Burlington people are eager to serve you well. Call on us. You will receive the kind of service which makes each of us proud to say, ***"I am a Burlington Man!"***

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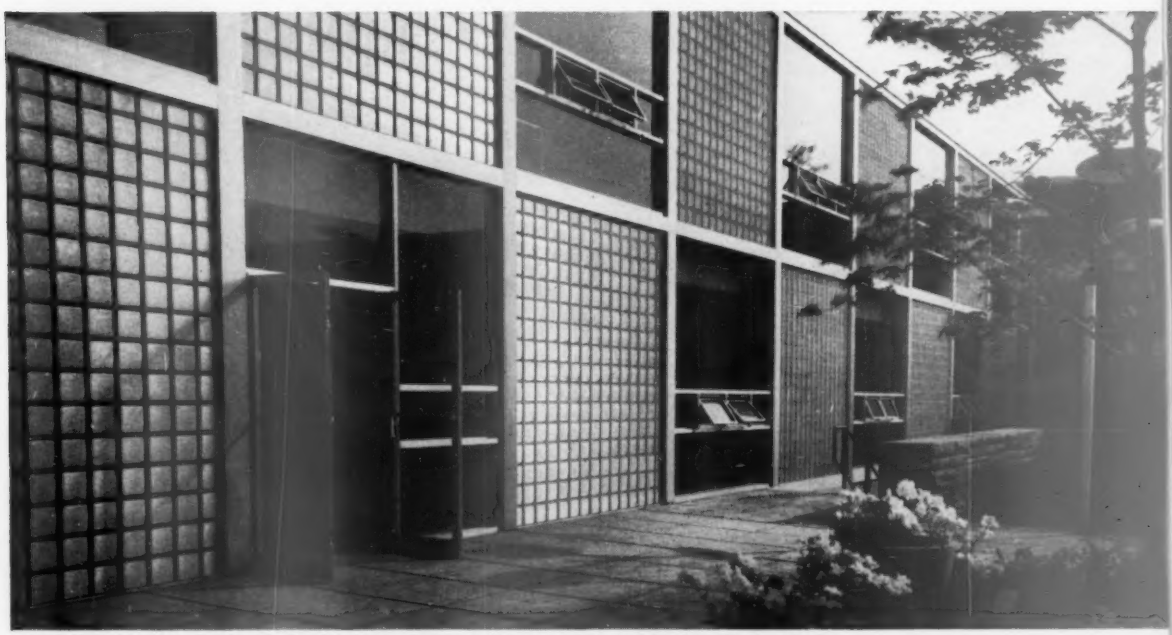
See why Pittsburgh Corning Products make the things you build cost less, last longer, look better



John J. Kane Hospital, Pittsburgh, Pa. Architects: Button & McLean—Mitchell & Ritchey, Pittsburgh, Pa.

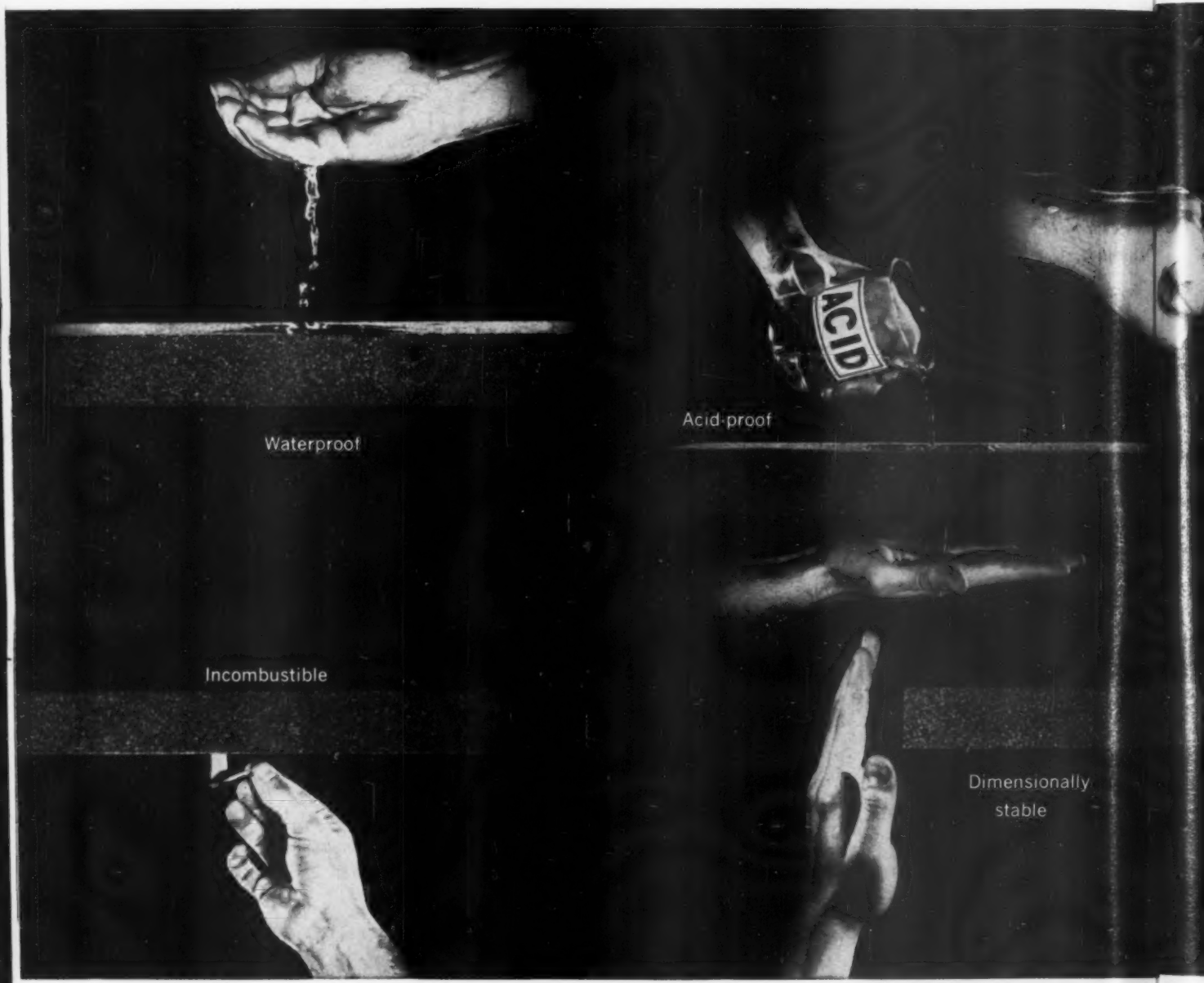
example:

PC Glass Block curtain wall in a core building. Considerations of psychological security, plus exterior interest and harmony dictated major curtain wall use of PC Glass Blocks in this core building . . . the connecting link between units of the new John J. Kane Hospital in Pittsburgh. Set at regular intervals along corridors in the building, the Glass Block panels create a feeling of solidity and protection for the patients moving through.

The alternate areas of functional Glass Blocks and plate glass set up an interplay of voids and solids to increase the interest level of the environment. And the Glass Blocks' texture, substance and non-institutional appearance add measurably to the visual appeal of the design. All this while the Glass Block panels admit soft, diffused daylight—reduce glare and heat.

Good designs like this grow out of materials which give the architect true authority over his designs. And the final page of this advertisement describes the Pittsburgh Corning product development program which blends form and function to give the architect just such design authority. (*Continued*)

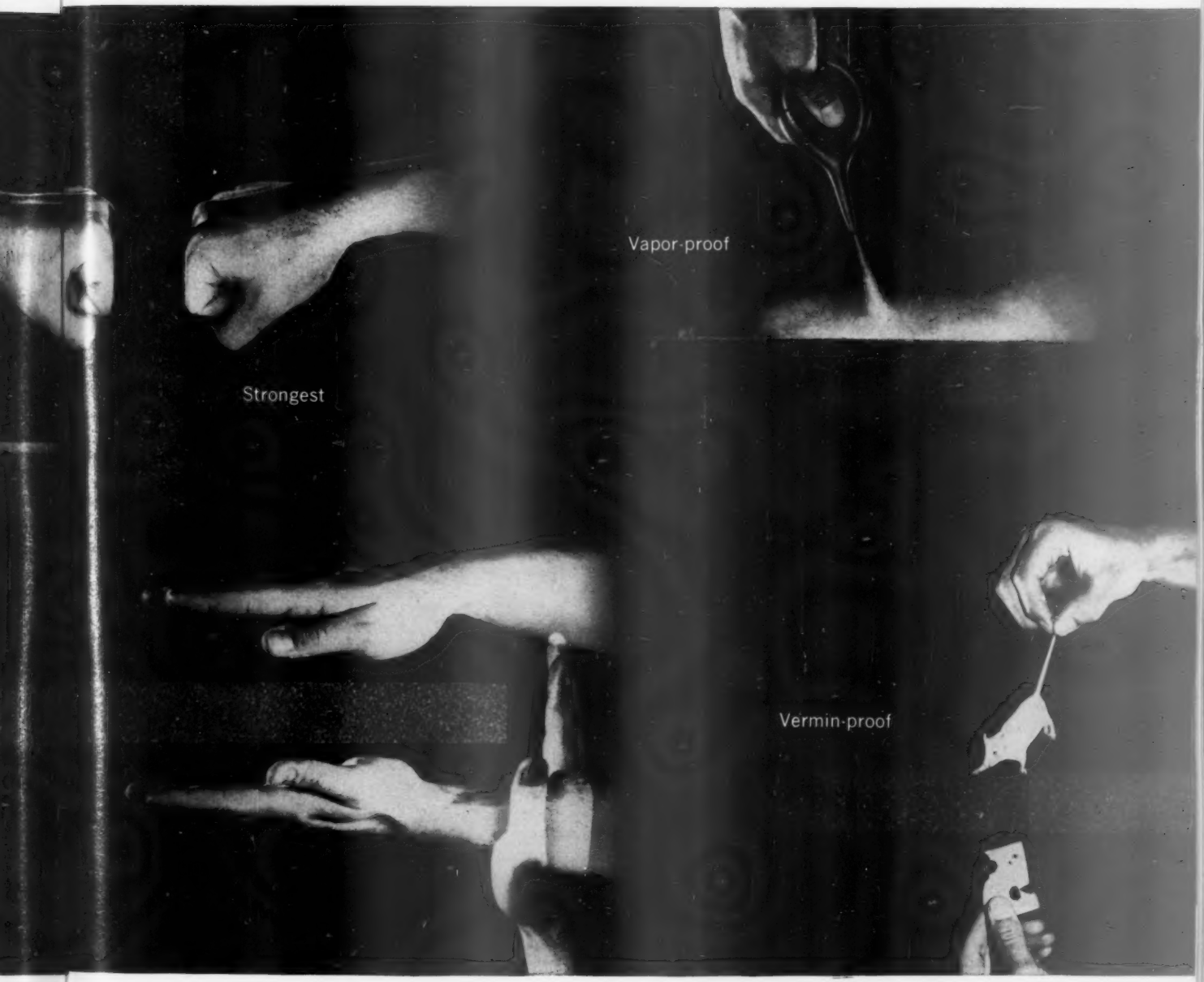
PITTSBURGH PC CORNING



example:

FOAMGLAS®: the one insulation combining the seven benefits pictured here. These seven photographs illustrate a single important point about FOAMGLAS, the one cellular glass insulation. The point? No other insulation wraps up so many important benefits in one material.

However you use insulation, you'll find it of vital importance that FOAMGLAS is completely impervious to moisture—both liquid and vapor. This insures that FOAMGLAS will never fail to deliver the same high insulating efficiency. Its strength and rigidity give



FOAMGLAS surprising structural value in many applications ranging from curtain wall panels to roof insulation, to cavity wall or even pipe insulation. The incombustibility and dimensional stability of cellular glass are important in many applications . . . as are its acid resistance and imperviousness to vermin attack.

With FOAMGLAS, Pittsburgh Corning makes available a single material capable of furnishing the answer to your most demanding insulating problems. A solution which is truly low in cost because of its lasting effectiveness.

(*Continued*)

PITTSBURGH CORNING

example:

NEW 1¾″ FOAMGLAS® Roof Insulation: unique benefits for more roofs at lower cost

If you've ever compared the quality of roof insulations, you'll recognize FOAMGLAS, the cellular glass insulation, in this picture. And you'll know that it's the one material that combines all these benefits: moisture-proof for constant insulating value . . . a natural vapor barrier . . . incombustible . . . and strong enough for every roof and traffic load.

What you may not recognize is the new 1¾″ thickness of the FOAMGLAS roof insulation pictured. Now Pittsburgh Corning makes it possible to put the quality of FOAMGLAS on roofs needing less than 2″ insulation. And new 1¾″ FOAMGLAS Roof Insulation costs less. 25% less. Now FOAMGLAS, which requires no vapor barrier, is competitive with other roof insulations on an installed basis.

(*To be continued*)

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- ☐ FOAMGLAS STAY-DRY Pipe Insulation
- ☐ PC GLASS BLOCKS
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BUSINESS OUTLOOK

BUSINESS WEEK
OCT. 24, 1959

Here's a glimpse of **the secondary effects of the strike**—effects that will linger no matter how fast steel production recovers:

Initial claims for unemployment compensation are rising rapidly.

In the week ended Oct. 10—as secondary layoffs really began to make themselves felt—new claims rose to 280,000, about 54,000 higher than in the preceding week. Of these, **some 22,600 could be directly traced to steel troubles,** the Bureau of Unemployment Security reported.

These secondary layoffs are wider spread than you might imagine unless you follow such things closely.

All but four states reported a rise in new claims for unemployment compensation in the week ended Oct. 10. The most for any state, directly blamed on steel, were 5,800 in **Illinois** and 5,000 in **Pennsylvania.**

You get some idea of the amount of enforced layoffs (at a time of year when employment opportunities should be excellent) by comparing these compensation claims with the like week in 1956 and 1957.

This latest weekly total of 280,000 was **more than double the comparable 1956 figure and 35,000 higher than in 1957.**

—•—

Broad measures of production, such as Business Week's Index (page 2) and the Federal Reserve Board's, will be **cross-hauled by contrary trends** throughout October and most of November.

There will be **the upthrust of rising steel output.** That, in turn, generates greater demand for **fuel** and **electric power.**

Freight movement will rise. But **steel-using industries** such as autos, appliances, and machinery are likely to be limping for want of steel.

September production, over-all, fell only slightly below August.

- **Steel** output had its sharp drop in August and production of other basic metals fell only a little in September.
- **Other industries** were able to eke out fairly well through September before the actual metal shortage began to pinch.

Thus the Federal Reserve Board's index, at 148 in September, was off only a point from August.

Metal fabricating ran as strongly in September as in August. (That, of course, does not include output of primary metals.)

This means actually that **most metalworking lines were more active,** for they had to take up the slack caused by the earlier-than-usual model change which pulled auto output substantially below August's rate.

Total production in September, for all the hardships, remained 8% higher than a year earlier as measured by the Federal Reserve Board. And for manufacturing, the year-to-year gain was a bit better than 9%.

—•—

Upward pressures on the prices of nonferrous metals have been grow-

ing, particularly abroad. Tensions mounted as the London Metal Exchange waited for Washington to step in and end the steel strike.

These pressures stemmed, in no small measure, from other **strikes which have been limiting this country's output** of copper, lead, and zinc.

However, **world-wide recovery** has been contributing (BW—Oct.17'59, p28). This has served to shorten warehouse supplies available for spot sales in London, particularly in the cases of copper and zinc.

Speculative buying doubtless has played its customary part in shortening supplies of nonferrous metals, buying being encouraged by the belief **the steel strike's end would boost fabricating demand.**

In the case of zinc, the argument is obvious: Use in galvanizing, cut back for want of steel to coat, can be expected to pick up sharply as soon as steel begins to flow in even reasonably normal fashion.

At midweek **the price of zinc was marked up for the second time** in less than a month.

Nevertheless, the metal still has its problems. **Over-all supply still is quite ample** despite strike losses. And, while use in **galvanizing undoubtedly is about to rise, demand for die casting** will be hurt to the extent that output of autos and appliances is pinched (even though galvanizers and die casters don't necessarily use the same grade of zinc).

Aluminum, meanwhile, is making a new bid for zinc's market.

Always a competitor in die casting, aluminum now wants to muscle in on galvanized products in the construction market (a move that has been encouraged by the current shortage of galvanized products).

This takes the form of **a price cut calculated to make aluminum sheet about 15% cheaper to the construction industry.** The metal trade wonders, however, what the outcome will be; McGraw-Hill's E&MJ Metal and Mineral Markets notes that margins on galvanized sheets appear to be good enough to permit producers to meet aluminum's new price.

Lower prices on what purports to be a limited number of aluminum products have **a lot of independent fabricators screaming.**

The cuts were made by the industry leaders who produce ingot as well as the end products. And the independents **claim the cuts run a lot farther than simply to construction items;** they say that anywhere from 25% to 45% of all aluminum business is affected.

Here's the squeeze: Independents (who buy their basic metal) claim they **can't meet the new prices without a price cut on ingot.**

—•—

Cotton textile operations are assuming all the aspects of a boom (not to mention the potential of a bust).

Mills not only are **sold** clear through next year's first quarter but are **booking** into the third. Meanwhile, secondary offerings of gray goods are commanding good premiums over mill prices.

This, of course, worries those who all too often have watched **excess stocking and frantic forward buying send the industry sprawling.**

Contents copyrighted under the general copyright on the Oct. 24, 1959, issue—Business Week, 330 W. 42nd St., New York, N. Y.

You'll smile at its good looks

. . . grin at its efficiency . . . and love the way it lasts

Good looking office furniture is an important business asset . . . as long as it *keeps* its good looks. And that's where ASE furniture leads the parade. Look carefully at ASE desk tops. See the *double* shell construction with a unique honeycomb structure inside that deadens sound, insures extra strength, permanent smoothness. The lustrous ASE finish will last for years. Bonderite treatment permanently anchors the baked enamel to the metal for resistance to corrosion, mars and scratches.

There's no extra cost for this built-in quality and good looks. That's true of all ASE furniture . . . desks, chairs, credenzas, L-units, filing cabinets. So, before you make that important investment in office furniture, be sure to see the complete ASE line. Your ASE dealer is ready to help you plan your office for lasting beauty and efficiency that will keep you smiling. See him soon.

ASE

ALL-STEEL EQUIPMENT Inc., Aurora, Illinois

Desks • Chairs • L-units • Credenzas • Tables
Bookcases • Filing Cabinets • Storage Cabinets

Boosts production over 10% by switching cutting oil . . . more

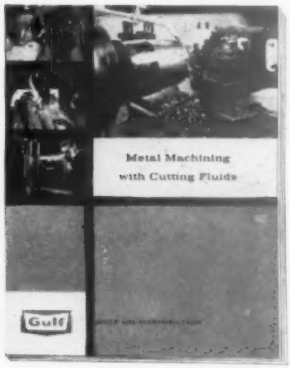
GULF MAKES THINGS

Many companies would be happy to get a 10% production increase from such major undertakings as plant automation or expensive new equipment.

But here's a case where production was increased 10% simply by changing cutting oils for machine tools. It happened at the Hancock plant of Manning, Maxwell & Moore, Inc., Watertown, Mass. The company is a leading producer of valves, gauges, electronic process controls, hoists, cranes and a wide variety of other precision-built equipment for industry.

Here's their report: "Before we switched to Gulfcut Heavy Duty Soluble Oil, our previous emulsions had permitted ground finishes of about 11 micro-inches on valve components. Now we average 6 to 8 micro-inches.

Checking the finish on valve components are: left to right, Mr. R. M. Drennan, Gulf Sales Representative; Mr. Charles Grillo, Machine Shop Foreman, and Mr. B. W. Morrison, Quality Control Superintendent at the Hancock Plant of Manning, Maxwell & Moore, Inc.



For production men: new Gulf 100-page textbook on proper selection and use of cutting oils for all machining operations. Complimentary copy on request.

Grinding valve components on a surface grinder at Hancock Plant of Manning, Maxwell & Moore, Inc. The cutting fluid is Gulfcut Heavy Duty Soluble Oil. Shields are removed and operation suspended to show grinding wheel and workpieces in place on stock table.

proof that

RUN BETTER!

As a result, we have reduced lapping time to a minimum and improved production more than 10%."

If your company uses petroleum products for plant machinery, for company cars or trucks, or in any other way, we invite you to see how Gulf makes things run better. Just call your nearest Gulf office or write us for more information.

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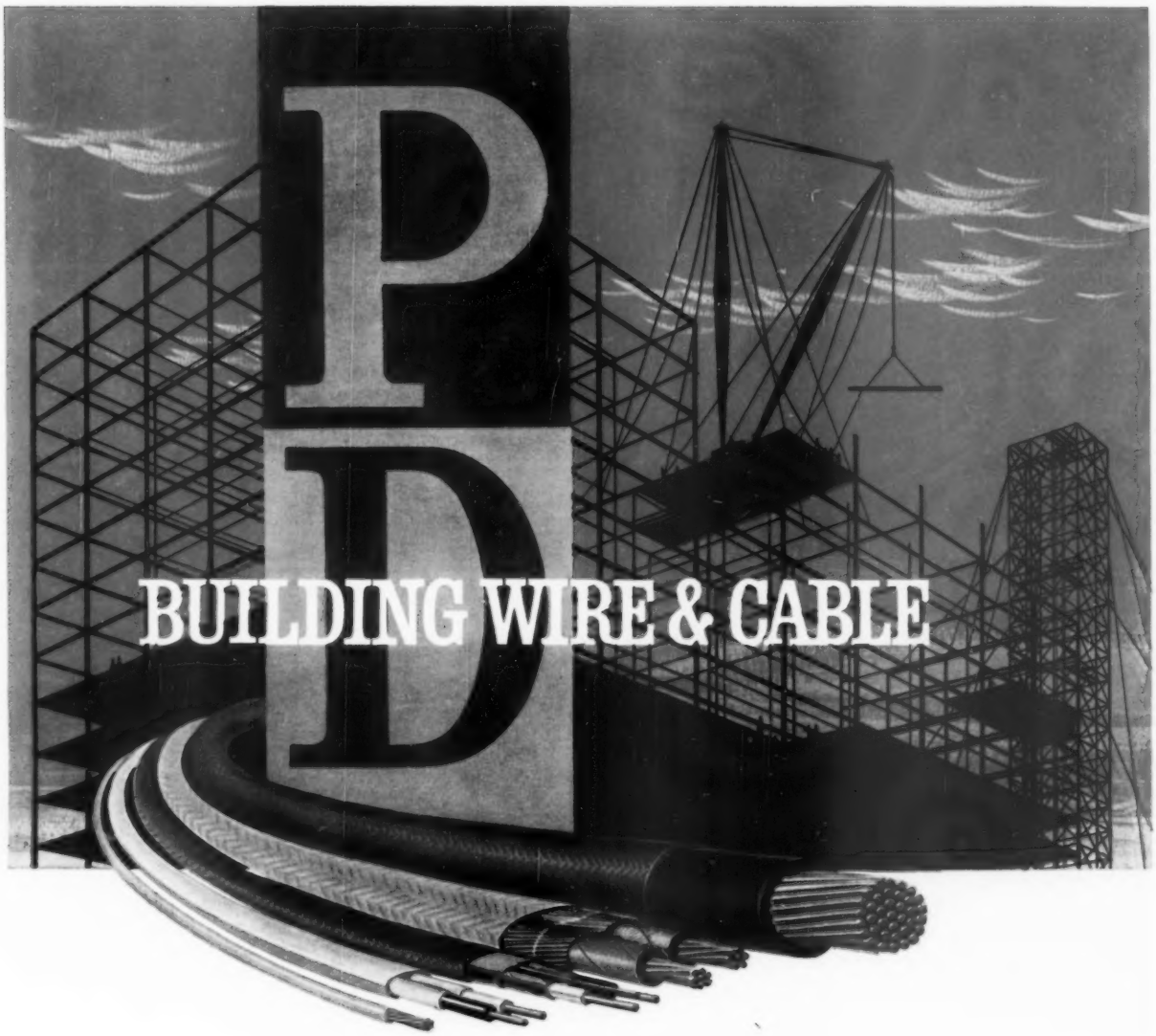

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PD

FIRST FOR LASTING QUALITY—FROM MINE TO MARKET

BUSINESS WEEK

OCTOBER 24, 1959

NUMBER 1573

TURNING POINT Pres. Eisenhower gets report of mediation failure from board of inquiry members John R. Perkins, Paul N. Lehoczky, and Chmn. George W. Taylor—leaving Taft-Hartley injunction as next step.

Steel Fight Goes to the Courts

U. S. District Judge Herbert P. Sorg in Pittsburgh ruled Wednesday afternoon that a half-million striking steelworkers must return to work because their long walkout is now "inimicable to the public health and safety." He signed the Taft-Hartley injunction requested by the Justice Dept.

Hardly an hour later, Judge Austin L. Staley of the Third Circuit Court of Appeals stayed Judge Sorg's restraining order until Thursday, to "preserve a status quo" in the steel dispute until his full court could hear a United Steelworkers appeal.

Thus the question of the legality of the federal injunction in the 14-week steel strike—and in "national emergency" strikes generally—started on its way to the Supreme Court.

• **Ready to Go**—Assuming the appellate court upholds the Taft-Hartley injunction, the shutdown of 85% of the nation's basic steel industry will end this week. The union will waive further requests for stays of the injunction after the Court of Appeals acts.

At midweek, mills and furnaces were being prepared for a quick resumption of operations. Steelworkers were awaiting return to jobs, grumbling because of the compulsion—but relieved after at least 100 payless days.

The future is uncertain for the steel companies and steelworkers—and for all who depend on a sure, steady supply of steel. Nothing short of a full settlement of the labor-management contract dispute can guarantee uninterrupted work beyond an 80-day period—and according to a Taft-Hartley board of inquiry, there is not "any single issue of any consequence whatsoever upon which the parties are in agreement."

• **Reporting Failure**—The board began public hearings on the issues in the steel dispute a week ago Monday. During the week, hopefully but briefly, bargaining resumed. When negotiations collapsed, the board reported to the President. Hours later, he instructed the Justice Dept. to seek an injunction.

The legal moves followed swiftly. The government testified that there are

"acute shortages" of steel needed for vital defense projects. The steel shutdown has already "produced some delays in nine military projects," an assistant U. S. attorney general warned.

• **Federal Arguments**—The government attorney, George C. Doub, cited other statistics reporting:

• A total of 765,000 idle in steel and dependent industries.

• In all, 310 steel plants, 118 iron ore mines, and 11 "transportation facilities" shut down in 32 states—with a heavy impact on local and state economics.

• A decline in steel inventories from an "abnormally high" 24.8-million tons in mid-July to a "dangerously low" 10-million tons now.

• **Union Retort**—The United Steelworkers denied that a national emergency exists—or is threatened. Arthur J. Goldberg, general counsel for the union, argued that the strike has not yet caused a serious shortage of defense steel—and that mills still operating, producing a little more than 15% of the country's normal tonnage, could supply military needs on priority if necessary.

He contended that the companies have counted on a restraining order from the start of bargaining—and that this has kept them from bargaining seriously on "just" contract terms. Supported by USW's Pres. David J. McDonald, Goldberg argued the propriety of issuing an injunction that the union contended would relieve pressure on the employers.

• **T-H Questioned**—And Goldberg raised substantial questions of the legality of "national emergency" injunctions under the Taft-Hartley Act. These are the questions that will be ruled on in the court maneuvers that are upcoming.

The United Steelworkers challenged Taft-Hartley national emergency provisions once before, in 1953, when the government enjoined a strike at a Dunkirk, N. Y., plant producing products for atomic energy installations. A federal court rejected the challenge, and the Supreme Court refused to review its decision.

The constitutional argument sent Judge Sorg to his law books, but it did not sway his decision. He ruled that the strike must end.

• **After the Injunction**—With the injunction in force, what can be expected to happen? How much work will be done? Will morale problems mean more grievances and disrupted production? And what are the prospects of a settlement before the end of the 80-day injunction period, when steelworkers would be free to strike again?

These are now crucial questions. Steel company industrial relations people admit they are worried about the answers.

A few days ago McDonald was asked what his striking unionists would do if USW failed to block a Taft-Hartley injunction. "American steelworkers will obey the law of the land," he said. Then he added: "I'll tell you this, they are not going to give up their fight for a contract they can live with."

• **Morale Problem**—It will take time, with plants in operation, to interpret the meaning of these remarks. However, steelworkers in Pittsburgh, Chicago, Birmingham, and other industrial centers have said flatly that "nobody's going to break his back to build steel inventories up again."

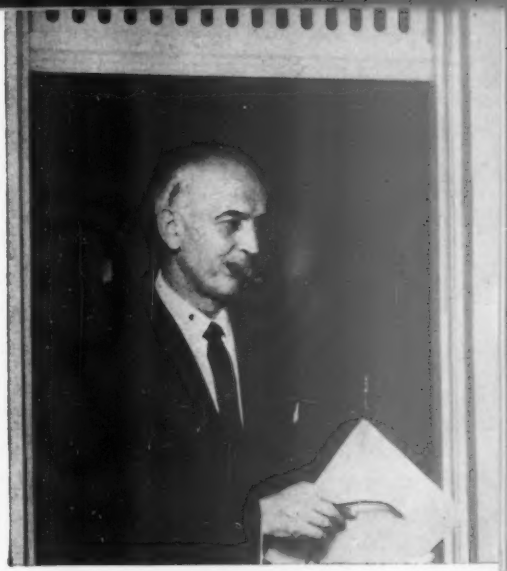
A return to work voluntarily, without a settlement, can always be ex-

SATURDAY—USW chief David J. McDonald leaves union-company conference . . .

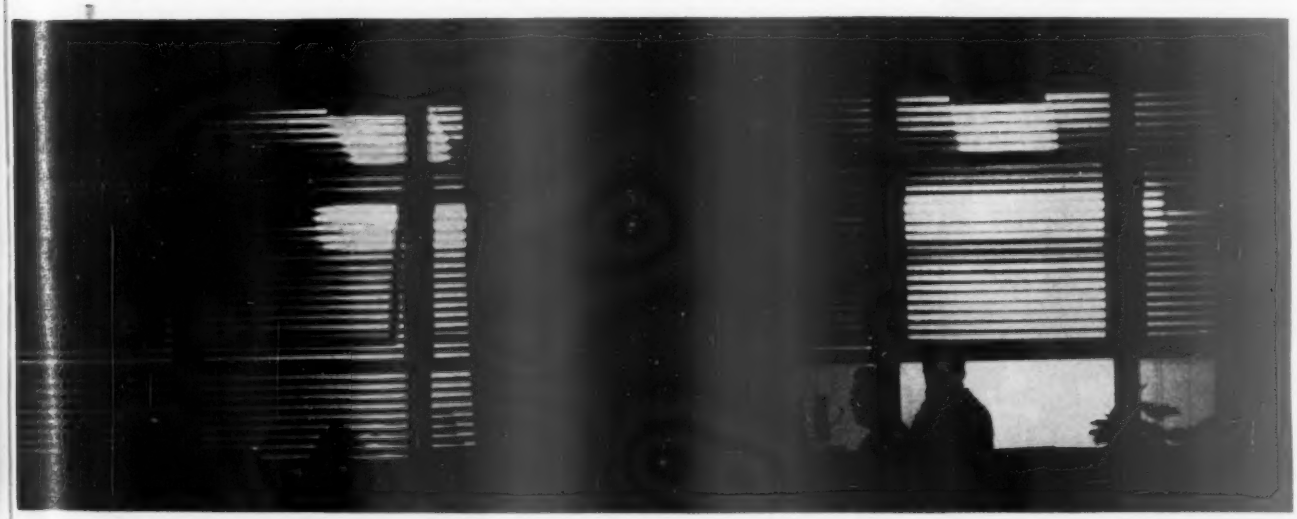
SUNDAY—USW counsel Arthur Goldberg makes union's last plea before board.

. . . At day-long board session, Cooper presents companys' case. Later, he makes last-minute offer to arbitrate work rules issue, but McDonald calls offer "loaded."

. . . and waiting press and management men hear explanation of companys' latest package, which union had rejected as "totally unacceptable." Result, as spell-out . . .



. . . by R. Conrad Cooper, top management negotiator, makes clear, is stalemate.



SATURDAY NIGHT—lights stay on late at the USW headquarters, as union's executive board hashes over situation to decide on course.

. . . Board members Lehoczky, Taylor, and Perkins confer on troublesome point in testimony. Board made use of hearings in final effort to mediate a settlement.

. . . Outside, Labor Secy. James P. Mitchell waits for sign of break that never came.

END OF CHAPTER—Board leaves President; later, it will meet and report again.

NEW PHASE—Federal Judge Sorg (left) gets injunction plea from U. S. attorney.

pected to result in grumblings; it doesn't always mean that workers will slow their pace—or give up overtime premium pay opportunities.

For a time, though, morale will be bad. Steel employers are reconciled to that. Supervisory workers in the plants of at least one company have been receiving special training in problems that they might run into with recalcitrant crews.

• **Indirect Pressures**—The problems of getting good production in an injunction period may prove academic. There is no likelihood of a quick steel settlement—but, indirectly, forces may be at work that will create pressure for steel agreements.

The United Steelworkers also represents thousands of workers employed by major aluminum companies. Just before a strike deadline earlier this year, Edgar Kaiser of the Kaiser Aluminum & Chemical Corp.—and of the Kaiser Steel Corp.—succeeded in having USW aluminum contracts extended until 30 days after a steel settlement or Nov. 1, whichever is earlier.

In the past several weeks, Kaiser cooperated with McDonald and Goldberg in drafting a suggested settlement for the steel industry. Major companies rejected it. Kaiser Steel, one of the 12 concerns in the Steel Companies Coordinating Committee bargaining with USW, did not break away from the SCCC for a separate settlement, although at midweek Kaiser was still "in touch" with his union friends.

• **Back to the Table**—Aluminum bargaining will be resumed in one week, according to a tentative union timetable. The "Kaiser plan" for a settlement in steel will probably be sought from Kaiser Aluminum, the Aluminum Co. of America, and Reynolds Metals Co. Since it calls for no wage increase until mid-1960, it could be a basis for serious bargaining—and perhaps settlements.

If Kaiser Aluminum settles, Kaiser Steel isn't expected to hold out long. And if agreements can be reached with Alcoa and Reynolds, pressures for settlements in steel will build up steadily.

Meanwhile, many smaller steel companies and fabricators have bargaining dates to keep with the union.

• **Tail Wagging Dog?**—USW expects to be busy—and successful. One union spokesman said in Washington a few days ago, when an injunction looked inevitable, that "the tail might wag the dog" this time. Privately, many in government circles think the same thing.

Public mediation narrowed issues. After a cooling-off period, the Federal Mediation & Conciliation Service will call the parties together again. The FMCS is optimistic that signatures will be on a contract by yearend.

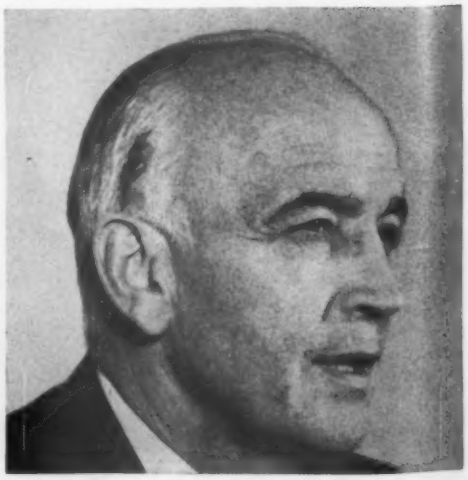
STEEL—2

Why Talks

In the words at the bottom of this page, a weary and deeply disappointed steel board of inquiry admitted failure of its efforts to bring about a voluntary agreement in the contract dispute between the basic steel industry and the United Steelworkers. Dr. George W. Taylor, chairman of the three-man Presidential board, showing the fatigue of the difficult day, told reporters gravely: "This is a breakdown in collective bargaining—there is no doubt about that."

• **Too Little, Too Late**—There had been a flurry of negotiations during the weekend, an exchange of proposals and counter-proposals. It had produced some movement from a dead center, but it had come too late and was not enough. The positions of the parties had frozen again. And, at 9 p.m. Sun-

McDONALD . . .



COOPER . . .

Failed: Deadlock on Work Rules

day, there was no time left: The board had a deadline set by the President, just 13 hours off.

So, regretfully, the board of inquiry bowed out of the dispute it had entered 10 days before. It retired to a third floor room in the Labor Dept. building in Washington to draft, in the midnight hours, a report to the White House—one that would clear the way for an injunction to require steelworkers to return to jobs.

• **Little Surprise**—The parties—the basic steel industry bargaining through a coordinating committee of 12 major companies, and the million-member USW—had failed to resolve their differences through all the successive stages—voluntary collective bargaining, then confidential mediation through the Federal Mediation & Conciliation Service, and finally the board of inquiry's public mediation, what it called "a kind of collective bargaining in public."

The failure was no surprise to most of those who had followed the negotiations closely over a disillusioning five-month period. There had been a few periods of optimism but, invariably, the hopes had been quickly dashed.

When the parties went to Federal Court in Pittsburgh Tuesday afternoon for injunction proceedings, they were where they had expected to be all along.

But, why? The answer can be found in the nature of the issues and in the often-overlooked fact that collective bargaining has changed subtly in the last year or so. The cents-per-hour in wage and "fringe" benefits aren't so important as a factor in bargaining as they were a few years ago.

Labor's one-time great preoccupation with winning economic gains has given way somewhat; it is unwilling to cede ground—for more pennies an hour—on noneconomic issues that it considers vital to job security.

• **What This Means**—This is particularly true in industries with high wage levels. And the steel negotiations demonstrated it with forceful clarity.

There would not have been a steel strike if the overriding issue had been an economic one, a wage increase. Steelworkers struck, and maintained their strike lines solidly and angrily, not for more money but because they were convinced that contract changes demanded by the steel companies would take away some of the job security they have had.

Steelworkers are returning to their jobs now under federal compulsion, but the dispute that brought on their strike July 14 still must be settled if there is to be any certainty of production into the new year.

Economic differences can be resolved within the next 80 days. The problem that really stands in the way of a full and satisfactory settlement involves contract changes. The issue is more philosophic than specific, is highly charged with emotionalism, and is so complex that anger comes easier than understanding.

• **No Phony Issue**—It is easy to label the contract changes a "phony" issue, a smokescreen behind which the parties are negotiating on economic terms. The steel board of inquiry doesn't agree. In its report to the President it left no doubt that it considers the contract issue the "most serious bar to a settlement of the strike."

I. Money Issues

"Real negotiating" took place for the first time when the steel board conducted public hearings in a packed interdepartmental auditorium next to the Labor Dept. building on Constitution Ave., according to Dr. Taylor.

The board sat before a battery of microphones, with press and television cameras focused on them. Union and industry negotiators told of the contract talks during the wearying months since early May, the give-and-take that normally isn't discussed outside smoke-filled negotiating rooms. They admitted, in answer to the board's caustic questions, that actually there had been very little give and very little take in those months; not much had been accomplished.

Prodded by the board, the two sides made a few concessions. Private negotiations between the union and Edgar Kaiser of the Kaiser Steel Corp., who hoped to find a basis for an industry-wide settlement, stirred the parties a bit more.

The industry made two important changes in its position, and the union made one. Management raised its wage-fringe offer to 2.6% of total employment costs (from 2%) and said that it would accept a limited cost-of-living clause in a new contract. At the same time, it offered to revise its contributory insurance program to include a new noncontributory major medical plan, but one that would require employees to assume medical costs below a certain level.

The USW, for its part, pared down its economic demands; it offered to do without a wage increase this year, limiting itself to "fringe" gains now and a "moderate" increase in pay next July.

The concessions left labor and management about 1¢ apart on a 1960 wage increase, although the parties differed on when the raise should be given. They still disagreed rather sharply on "fringe" matters—pensions, insurance, and supplementary unemployment benefits—but appeared close enough together on basic points to indicate a possibility of agreement.

II. Work Rules

The trouble is, at this point the parties aren't willing to concentrate on an economic settlement. They are in complete disagreement on management demands for contract changes to eliminate wasteful plant practices and increase work efficiency—and that stands in the way of an agreement on any other points. On the contract issues the parties are just about as far apart today as they were in the early days of bargaining.

At the last minute the industry offered to submit "local work practices" to binding arbitration, for a solution within 60 days. Under the companies' proposal, the arbitration by a three-man board would be on the one ques-

"We regret very much that we are unable to report a settlement. We found the differences of such a nature that it is impossible to get a meeting of minds with respect to them." ..... **TAYLOR**

tion: "What, if any, changes should be made in the local working conditions provisions [of steel contracts] to enable the companies to take reasonable steps to improve efficiency and eliminate waste with due regard to the welfare of employees?" The union flatly rejected the proposal.

The union had suggested a fact-finding study of the entire work practices question over the next two years, with recommendations to be considered in the next collective bargaining—in 1961 by the union timetable. The industry rejected this outright.

That left the contract change issue where it had been all along: angrily in dispute.

• **The Problem**—Economic issues can be outlined with some precision. They are amenable to compromise because it is possible to give a little and take a little when numbers are involved.

The contract-change issue is far from a problem in mathematics. It is more abstract than specific. It defies definition and illustration. In a way, it is more a matter of philosophy and mood than anything else.

The industry—particularly its Big Three of U.S. Steel, Bethlehem and Republic—would like to have broad powers (1) to make changes in local working conditions, (2) to change the scheduling of work, and (3) to set penalties for unauthorized or wildcat strikes. It originally asked for other changes; it reduced its demands to these three.

• **Critical Issue**—The critical one of the three as far as the bargaining is concerned is the first. It involves Section 2(b) of the U.S. Steel contract, and similar clauses in all major steel contracts except that of the Wheeling Steel Corp. It is also included in many agreements between smaller companies and the USW.

In broad terms, the clause protects existing work practices. It was written into steel contracts in 1947 because of the practical impossibility of incorporating in a national agreement the multitude of local rules and practices established at a company's many plants. These practices include such matters as the size of a crew for a specific operation, relief time, spell arrangements, and other working arrangements.

Section 2(b) gives management the right to "change or eliminate any local working condition if, as a result of action taken by management . . . the basis for the existence of the local working condition is changed or eliminated." That is, a change can be made if management changes a machine or a production method. Even then, disputes may arise on what is a new basis for a job, so "any affected employee shall have recourse to the grievance procedure and arbitration, if necessary, to have the company justify its action."

Otherwise, under the clause, local working conditions cannot be changed except through negotiations with the union. A plant superintendent might believe that a 12-man crew is unnecessarily large for a given operation—10 men would be enough. But, if the operation does not involve new labor-saving equipment, the crew cannot be cut unless the union agrees—and it isn't likely to.

Take another hypothetical example—typical of the kind of situation that has developed in many places. Steel contracts give foremen the right to order work done—provided it is a lower-rated work. For one reason or another, in the past this right frequently wasn't exercised. In a certain operation, a crane floorman hooks and unhooks loads and signals the crane operator. If sand has to be spread around a shell base to keep the heat in, the floorman ordinarily does the job; he has the time for it. But, on occasion, floormen have refused and got away with it; laborers have been used to spread the sand—an extra job and an extra cost. By the mistake of failing to be tough in the past, management can let a local practice develop, protected by Section 2(b).

• **Opposing Views**—Companies contend that Section 2(b) has seriously hindered efforts to improve plant efficiency. Unnecessary manpower is required in some operations. There are extra jobs—and job classifications—but jobs can't be combined. There are other wasteful practices, the companies maintain.

The complaints apply almost wholly to old and continuing operations. In public hearings, the parties expressed full agreement that Section 2(b) does not prevent or interfere with adjustments that result from technological changes, changes in equipment or manufacturing processes. The hindrance comes, according to management, in cases where there has been no investment in new facilities to change the basis for the existence of a local working condition.

USW argues that "the existing language [in steel contracts] rebuts the notion that featherbedding has been protected or that management has been obstructed in improving productivity or efficiency." It contends that Section 2(b) merely protects its members against "unilateral imposition of an increase in an individual's workload."

• **How It Works**—Take the example of the 12-man crew. Without Section 2(b), a foreman could cut the crew size to 10 men if he considered 12 unnecessary. Because the 10 would have to do more work individually and share more responsibilities, some would have to be upgraded in their jobs—entitling them to an additional 6¢ an hour in pay. But two jobs would have been eliminated at a saving of more than $7.00 an hour.

Another example—although examples are hazardous in such a complex area: Local plant practices provide that in some jobs, perhaps where there is intense heat, men are "spelled" periodically, to give them a chance to relax from physical hardship. The question can arise of how much time must be allowed off the job. Under Section 2(b), past practice must prevail, unless the union agrees otherwise.

There are thousands of work practices. They differ from plant to plant, and in plants they differ from department to department. They vary with the kind of steel being made; one set of practices might apply on a certain operation one week, another the week following. The argument about whether the practices should be negotiated at the national level, instead of by local bargaining, has gone on for years. Companies say they should; the union contends that local working conditions must be considered at the plant level—and in specific terms of particular jobs and practices, not in any broad manner.

Arbitrations have occurred at the plant level on specific points, and the industry has been widely successful in these. However, arbitrations frequently take as long as a year and a half. That's far too long to suit the companies.

If the local practices dispute has simmered so long, why is it boiling now? There's a pretty obvious answer: The industry now has the strength and the solidarity for a fight on the issue—and the bargaining climate is right for one, with labor on the defensive.

III. Board's Views

Although the board of inquiry could not under the Taft-Hartley Act make recommendations, it felt no restraint about making a few points on the hot work practices issue. At one point it noted that employers in many industries would welcome a clause, similar to steel's that would give them the right to change or eliminate local working conditions when technological changes are made.

At another, Dr. Taylor chided the industry for seeking unilateral rights to make sweeping changes. The companies "should take into account the human factors . . . rather than try to change work rules overnight," he urged. Moreover, he said, the union's resistance to any changes "would hardly be tenable" if the companies would offer some help to laid-off employees.

On the other hand, the board on several occasions quizzed union spokesmen on their outright opposition to proposals for changes—when the union could not be specific on how the proposals threatened the union and its members.

Businessmen Look at the Steel Strike

"Steel is fighting our battle. And steel is aware of this. It has what you might call a responsibility to hold out. . . The pattern of nearly all future labor-management bargaining will be guided by the tenor of a steel settlement."
—Chmn. John D. Wright of Thompson Ramo Wooldridge, Inc., Cleveland.

"The steel companies have my wholehearted support, but the feeling is growing in my mind that there could be a little more compromise than has been evident so far. I don't think the companies have presented their case to the general public adequately."
—Vice Pres. J. J. Schofield of Dura Corp., Detroit.

"The steel companies have done a lousy job explaining their position. . . But the mills have got to be supported because they're taking the rap for many industries. . . Management's right to manage is the key issue."
—Pres. Morris B. Pendleton of Pendleton Tool Industries, Inc., Los Angeles.

"There's footdragging on both sides. In over three months' time they should be much closer to a settlement."
—a Midwest machinery maker.

"We're suffering for lack of steel and so are the people we work for. But we're satisfied to stay this way to let the steel companies win. . . This damned featherbedding has to stop. We've all got to get rid of lazy people who just draw paychecks every two weeks."
—President of a Texas offshore drilling company.

"I have developed the feeling that Mr. McDonald is a damn fool. He doesn't seem to recognize the need for technical advances. . . Work rules are the real issue in the contest, not wages."
—a Milwaukee machinery manufacturer.

"If the steel companies don't hold out we're in for more and more trouble in the years to come. This is a contest between two main ideologies to see who's going to run the steel companies."
—Pres. Frederic A. Potts of Philadelphia National Bank.

"Steel is absolutely right in holding the line. . . The issues go much deeper than wages and work practices. They involve the national economy and our position in the world market."
—Pres. Howard P. Eells, jr., of Basic, Inc., Cleveland.

"I was 100% in support of the steel companies and I haven't changed a bit. . . In this issue of management prerogatives . . . lies the welfare of the corporation, and the welfare of the corporation is the welfare of all."
—Pres. Pollard Turman of J. M. Tull Co., Atlanta.

"We would rather operate in the red than see the steel companies give in. The steel companies are fighting our battle."
—President of an Eastern railroad.

"The union has out-played the industry in publicizing the basic issues. This could put steel management in a bad light with the public. . ."
—a Cleveland instrument manufacturer.

STEEL PART III

But Steel's Story Is Hard to Tell

The quotations above clearly indicate the nearly unanimous support from the business community which the steel industry has enjoyed right from the beginning of the strike and still enjoys. What they only hint at is a shift of sentiment against the industry position which has occurred elsewhere in the community as the strike ground on.

That shift has been most marked and most significant among the striking workers themselves. At the beginning of the strike, neither company nor union observers found any enthusiasm for the battle; that was one of the great weaknesses of the union bargaining position. By now, however—and again union and company surveys agree—the striking workers are convinced that important issues are involved, issues worth fighting over.

And among the general public, too, most observers sense a recent bewilderment about the industry position.

To industry public relations technicians, there is no mystery about what happened. The industry was widely successful in winning support for the anti-inflation stand it took at the beginning of the negotiations. When the industry emphasis shifted to a demand for contract changes regarding work rules and practices, it was never able to rally similar support.

• **Planning**—The first phase began in the late summer a year ago, when public relations and industrial relations committees of the American Iron & Steel Institute held a private meeting in New York to outline plans for 1959 contract negotiations, then eight months off. Top public relations men from all major steel companies were present, with Phelps Adams, of U. S. Steel, acting as committee chairman.

The industrial relations people said that steel companies would resist "inflationary" demands by the union in bargaining beginning in May. In effect, as one committeeman put it later, the industrial relations committee asked the public relations group to "establish a climate in which they could say a flat 'no' and stick to the word without it sounding like an arbitrary, pot-bellied, top-hatted approach to bargaining."

This wasn't an easy assignment. The public relations committee worked intensively for the rest of the year and

well into 1959, cooperating closely with Hill & Knowlton, Inc., public relations counsel to the Institute.

The result of the planning was a double-barreled public relations campaign, in some 430 newspapers, by the American Steel & Iron Institute and later the negotiating Steel Companies Coordinating Committee (BW–Jun.6 '59,p25).

• **Themes**–The ad campaigns that started in January hit hardest on a theme that the steel industry must fight everybody's fight against inflation by halting the sky-high inflation of wage and labor costs.

There were other themes. Of these, perhaps the strongest was a warning that inflated costs threaten the industry's ability to compete with foreign-made steel, so higher costs might mean fewer jobs.

While the Institute and Coordinating Committee ads were running, the United Steelworkers was campaigning in 40 selected newspapers. It pointed its ads to particular economic groups in communities, and asked: What would "an extra billion" of spending power mean to consumers and the businesses they deal with?

• **Impact**–Generally, it appears that:

• The industry put over its anti-inflation idea with marked success–not only with the general public but also with many of its half-million union employees.

• The union's arguments for "an extra billion" in spending power had much less public impact, and even failed to convince many union members that a pay increase would really be desirable.

The United Steelworkers might challenge this publicly; privately it won't.

A few days ago, in the midst of the maneuvering in Washington, a union official said frankly: "As long as the industry stuck to its inflation and foreign competition ads, we were losing ground. We were happy as hell when they slipped up."

The industry "slipped up" by introducing–cold, without advance planning–the contract changes issue. The union seized the initiative. The industry never got it back.

• **Vagueness**–The anti-inflation and foreign-competition campaigns were a product of thorough, careful research and planning.

But when contract changes on work rules became a major issue in steel negotiations (page 28), the industry's public relations machinery was thrown out of kilter. On its side, the union acted quickly to tell its members that the demanded elimination of a local work practices clause would "abolish seniority" and "move us back 25 years." It now had an effective strike slogan: "The job you save might be your own."

• **No Homework**–Industry homework had been done on economic issues with notable success; apparently, this wasn't so when the work-rules issues came up.

From the opening of bargaining, the industry had made clear that it intended to win contract concessions designed to increase plant efficiency and eliminate many wasteful practices. Nevertheless, the hassle over work rules created difficult public relations problems.

Not many people, even in the steel industry, have a clear understanding of what, precisely, the contract changes issue involves; they say that you cannot really know unless you are an industrial relations specialist and live with the problem, day by day, in dozens of different ways.

• **Questions**–Many of the questions on how the industry position could be put across successfully have never been answered. Unable to be specific, public relations efforts have had to concentrate on a philosophical question:

Is management going to be allowed to operate American industry at peak practical efficiency in the coming struggle to retain industrial supremacy for the United States?

• **Switch**–Such an appeal produced endorsement and support from business and industry. But it had less general impact. Steel's public relations surveys showed the campaign message wasn't getting across solidly to the public–and hardly at all to employees.

Worries over what local practices changes might mean–in the way of lost jobs–have created a really emotional strike issue. By persuasion (the companies say "misrepresentation") the union convinced the steelworkers that a "threat" to their security existed.

• **Effort to Recoup**–Because local practices vary so much, the industry is now trying to explain them–to its employees–company by company, quietly, through communications in their home towns.

Meanwhile, the industry is working on a new public relations campaign to be launched while a Taft-Hartley injunction is in effect. It would have two phases:

• Importantly, it would be directed locally at workers and townspeople in plant cities, and would stress that the industry proposals would be used only to increase plant efficiency–to make jobs better, not to jeopardize jobs. Behind this is a hope that, if persuaded of this, workers might vote to accept a company offer in a Taft-Hartley election at the end of the injunction period.

• A second phase would be slanted toward the public. It would not try to explain the specific things the contract changes could accomplish, but would stress the industry's offer to arbitrate–and the union's refusal.

Budgeting

DEFENSE Secy. McElroy, just back from a month's tour of the Pacific and Far East, this week began the last round in the prolonged and turbulent preparation of the military budget–the "annual blood-letting," as Pentagon wags call it. This year, the pressure on the budget is tighter than ever as the Administration holds spending to $41-billion in the face of growing military costs.

The Pentagon's greatest fear is that the current austerity in defense will be interpreted as a reaction to Khrushchev's peace talk. The Pentagon's enforced economy, of course, is not a consequence of the easing of international tensions but is tied to the fundamental fiscal policy of the Administration.

Still, there's no doubt that the new atmosphere of goodwill in world affairs is making it easier for the Administration to stabilize defense spending. And for the military pros–whose optimum plans if unfettered would add up to a sizable long-range boost in expenditures–a stabilized budget means reductions, stretchouts, and cancellations in major weapon programs.

• **$800-Million Cut**–The latest sign of what holding the line means shows up in the Pentagon's revised schedule of contract awards for the current fiscal year. The list, issued Sept. 11, shows that some $800-million less will be contracted out for procurement than had been planned as recently as last May.

Here are some of the big cuts: $180-million less for Navy aircraft; $380-million less for Navy shipbuilding orders; and at least $200-million less in contracts for Air Force missiles, planes, and other major equipment.

By trimming this year scheduled awards of contracts that would have run on into the future, the Pentagon expects to be able to hold actual outlays in fiscal 1961, starting next July 1, to the current $41-billion level.

I. First Draft

McElroy sat down on Thursday for a series of special meetings that will run daily for at least a week. In essence, he is presiding as judge in a series of debates. On one side is Defense Comptroller W. J. McNeil. On the other, the three Service Secretaries and Chiefs-of-Staff. The objective: to resolve the sticky policy disputes that are making the tailoring of next year's defense plans to the Administration's $41-billion budget (BW–Aug.22'59, p36) such a formidable chore.

• **Major Issues**–During McElroy's absence from Washington, McNeil's offices and the Services roughed out the

Weapons as Tensions Ease

● **Final slashes in the estimates are being made in what the brass calls the "annual blood-letting."**

● **The biggest worry: that the austerity program will be misinterpreted as a reaction to Khrushchev's visit.**

● **The hope is to hold fiscal 1961 to the present $41-billion level. That means some drastic pruning.**

outlines of a new budget that goes to Congress in January, and brought into sharp focus the major issues on which the Secretary himself must now rule before the defense spending totals can fit under the Administration's budget ceilings:

For the Air Force, the roughest decisions center on (1) the number of B-52 and B-58 manned bombers to be authorized next year; (2) production scheduled for liquid-fueled ICBMs—with special attention to the Titan project's future; (3) on whether to build more Atlas bases underground; and (4) on the rate of development spending for the "future-generation" B-70 bomber and Minuteman missile.

For the Army, the big question marks are (1) the future of the Nike Zeus anti-missile system (the Army wants to begin production); (2) the threat of another manpower cut; and (3) the volume of spending for combat vehicles, small arms, tactical missiles, communications gear, and other equipment for modernizing combat forces.

For the Navy, the toughest questions are (1) a threatened slash in plans for procurement of fighter aircraft and anti-aircraft missiles and construction of surface vessels; (2) the possibility of a personnel reduction; and (3) the rate of expanding the Polaris missile-submarine program.

• **Deadlines**—McElroy's decisions on these issues will be made by the end of November—except that the Zeus decision is being held off until next April pending a scientific appraisal of the controversial project.

Meanwhile, McElroy and his top advisers will be sifting evaluation reports on new weapon systems, and trying to mesh the individual Service proposals into one integrated defense plan.

II. Inter-Service Split

More than ever, the tight budget picture is spurring inter-Service wrangling over strategy. The Army, for instance, sees the Air Force's plea for still more manned bombers as a threat to its own procurement plans, therefore emphasizes the argument against a further buildup in nuclear striking power in favor of stronger preparation for limited warfare. The Navy joins in, argues for funds the Air Force wants for big bombers to be spent for carrier fighter aircraft.

This year's Pentagon budget-making is complicated by the uncertainty generated by the impending departure of both McElroy and McNeil. McNeil quits the Pentagon at the end of the month to become president of the Grace Line. McElroy will leave in December to become chairman of Procter & Gamble Co.

• **New Atmosphere**—Even more significant is that the fiscal 1961 defense budget is being put together in an atmosphere of new optimism over the cold war and disarmament.

Military careerists themselves cannot visualize a disarmament scheme or even limited arms control in the foreseeable future. And few civilian officials outside the Pentagon would disagree at this time. Says one high Defense Dept. official: "We are nowhere near a cut in military spending which could be related to disarmament. Sure, we'd like to reduce expenditures and lighten the load of armaments. But we've seen no meaningful move by the Russians to make us optimistic."

• **Economic Impact**—Despite this bleak talk on the possibility of arms reductions, the government is considering ways of obtaining more comprehensive data on defense output and employment in major industries. The objective, obviously, is to get a clearer line on the defense program's economic impact.

"We need a better grip on the problem," says one top-level economist. But he pooh-poohs the significance of the new study in terms of future defense cuts, says it is being made "only because we anticipate such questions."

III. The Outlook

As the budget plans now stand, military spending stacks up this way:

Aircraft production will dip below the $6-billion expenditure level for the first time since Korea. The volume of new orders (close to $7-billion this year) will slide even more. The ratio of funds for aircraft spare parts rather than new planes will be heavier than ever.

Missile production will go up some $1-billion to a total of about $5-billion. This is close to the rate scheduled for aircraft procurement.

Electronics procurement will continue to rise. Pentagon experts talk about a 7% rise over this year's $1-billion rate for "pure" electronics—that is, electronics not tied to specific missile or aircraft systems. One option program likely to benefit: ground communications.

Military construction spending will drop once more, reflecting this year's $400-million cut in new contract awards. But the volume of new construction business next year is slated close to this year's $1.5-billion total.

Shipbuilding will stay close to this year's $1.6-billion level, may slide off some as a result of the recent cut in new orders.

Research and development will rise slightly. The current level is $2.6-billion. The Pentagon is expanding its budget breakdown, however, into a "research, development, test, and evaluation" category to include fabrication of prototypes and the like—costs now covered by the procurement budget account. Measured along these lines, total spending runs to $3.4-billion this year.

The slight rise will incorporate cuts in aircraft and missile R&D offset by increases in military-supported basic research and in applied research on anti-submarine warfare techniques. And military space spending will rise above the current $309-million level as work is rushed on navigational, communication, early-warning, and reconnaissance satellites.

• **Basic Research**—The increase for basic research is expected to go into such fields as hypersonics (study of the dynamics of gases at very high altitudes); research into materials with the ability to withstand high temperatures encountered in the thermal barrier region of flight; and research into the nature of cosmic and electromagnetic radiation above the earth's atmosphere.

The Pentagon budget for what it calls "general sciences" now runs to $372-million. Probably about one-third of this is what academicians would consider basic research.

Actually, rejuggling of the Pentagon's fiscal books will make the research and development increase bigger than it is. The reason: Many more projects now carried under the procurement budget account will start showing up under the new "research, development, test, and evaluation" tag.

After the Strike Is Over . . .

. . . it will take time for business generally to get back in full swing.

But the main push in 1960 should be upward to new heights of production.

At midweek, you could assume the steel workers would be heading back to the mills under an 80-day Taft-Hartley injunction (page 25). Now the big question for business management is this: How has the four-month strike affected the business outlook for 1960?

Right now, the odds are strong that it has shifted the economic cycle. The strike has delayed the next upsurge of business activity for a few months.

Ever since the war, the U.S. economic clock has been running on a standard four-year cycle: first a Year of the Consumer, next a Year of the Investor, then a Year of Topping-Out, and finally a Year of the Government as private business reaches the downslope. A perfect example of this cycle was 1955-58. It ran without serious domestic or international disturbance.

Another way of expressing this cycle, of course, is "consumption-investment-recession-government." Either way, 1959 should have been the Year of the Consumer, the year when consumption dominated the economy. But, from the beginning, it took on the sawtooth pattern charted above—because it was also fated to be the Year of the Great Steel Strike.

In the first half, business activity was jazzed up by a furious rush to build inventory in expectation of the strike. In the first quarter, total business inventories climbed at annual rate of $6.1-billion; in the second quarter, at $10.4-billion. That made the annual rate of gross national production jump $10.7-billion in the first quarter, $12.3-billion in the second.

In the third quarter, the steel strike hit. From accumulation at a $10-billion annual rate, inventories swung to decumulation at a $2-billion to $3-billion rate; that adds up to a $12-billion or $13-billion subtraction from total output. Despite loss of earning power due directly or indirectly to the strike, rate of consumption in the strike quarter still rose by something like $2-billion a year, and investment in plant and equipment climbed nearly another $2-billion. But even with these offsetting gains, GNP fell about $7-billion—back to an annual rate of $478-billion.

I. Steel Sets Limits

These dislocations of the cycle raise questions about the near future. Has the economic clock been ticking relentlessly along, bringing us to a point only about 18 months from the next turning point toward recession? Or has time been suspended, the sequence of the four-year cycle scrambled or telescoped?

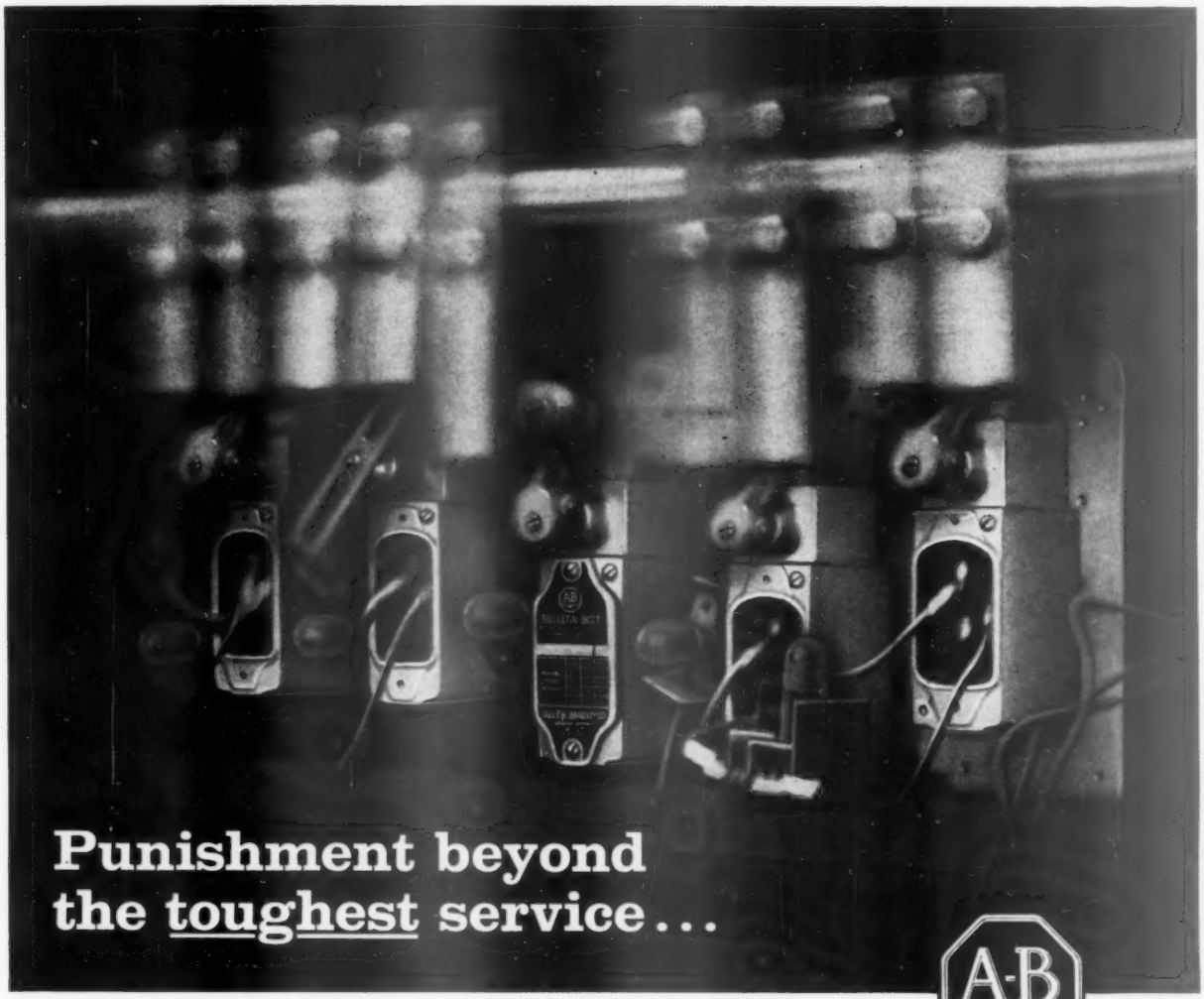
Much depends on the yet unsettled steel situation and, beyond that, on next year's labor bargaining in other key industries. At the moment, two questions of labor relations are paramount:

- How hard will steel workers try to produce steel in the current fourth quarter of the year?
- Will they sign a contract with steel management during the 80-day injunction period? If not, will they go out on strike again when the injunction expires?

• **Limiting Factor**—According to BUSINESS WEEK's best reporting and thinking, a steel contract will be written before the end of the 80 days. Even so, in coming months the problem of how much steel can be produced will be the major limitation on gross national product.

Assuming the steel mills can produce at 50% of capacity during the three weeks starting next Monday, Oct. 26, and at an 80% rate from then until Christmas, you would get about 20-million ingot tons in the fourth quarter.

But of course, what's crucial to the U.S. economy is not ingot tons but product tons of steel. There's a worrisome slippage between ingots, which can be produced in high volume relatively quickly once the mills start up



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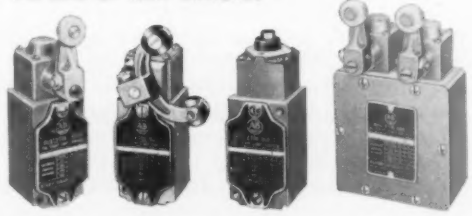

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again, and the steel product that's usable by manufacturers.

Slowdown by the workers might be a factor; many are saying they aren't going to help industry build inventory again before the Taft-Hartley injunction runs out.

However, deliberate goldbricking might not be the really important factor. Some steel experts believe the drag on product output will come in the finishing department—from accidental spoilage because the men will be rusty for fast work after their long strike, from traffic jams in various processes, from shipping delays.

• **Not Enough in Sight**—That's why even 20-million ingot tons may figure out as less than the 15-million product tons you would ordinarily expect to get. But 15-million product tons would be the equivalent of two months' shipments during 1955. Given the rate at which industry will be grabbing for steel just to fill up production pipelines, there doesn't seem to be enough output in sight to permit any steel inventory-building in the fourth quarter.

Moreover, the mix of steel products coming out in the weeks ahead may not permit everybody to stay at the production level he wants. The auto companies may be in particularly rough shape. The earliest steel that can be made when the mills reopen won't be good enough steel for autos. There'll be a couple of weeks when the iron chemistry won't permit full production of the high-quality, deep-drawing steels for auto sheets. And sheet capacity isn't adequate, in any case, to keep pace with ingot production.

• **Then the Rush**—Limitations imposed by the availability of the right kinds of steel won't block off expansion of total output in the fourth quarter, but they will be something of a drag. It's hard to see fourth-quarter GNP going much higher than $488-billion, and it might be a few billion less. Had it not been for the steel strike, GNP this quarter would have been right up against the half-trillion mark (BW—Dec.27'58,p36).

As things now look, the U.S. economy ought to hit that half-trillion mark in the first quarter of 1960. Once the steel contract is signed, the economy is going to advance in a rush:

Inventory building will be frantic. During the first quarter, inventories should mount at least at a $5-billion annual rate. Not only will there be a general rush to get hold of steel, but the auto companies will also be swinging into high gear to get cars in stock for the spring buying season.

Capital spending by business will rise strongly. During the last half of this year, the steel strike dragged expenditures on new industrial construction and machinery below the SEC-Commerce estimated rates—no one can yet say by how much.

Uncertainty about the business outlook has doubtless also been a limiting factor on industry's capital spending plans for the future. But a firm steel contract will speed up those plans. The McGraw-Hill survey of capital spending plans won't be published for a few weeks, but indications are already clear that the trend of capital spending next year will be up strongly—possibly by 15%—above this year's level. There's a chance that capital spending (as McGraw-Hill calculates it) may hit $40-billion in 1960.

Consumer buying will climb—mainly because personal income is certain to rise as the steel workers (and those who suffered layoffs because of the strike) go back on the job. Durable goods look especially strong. Detroit is looking forward to another big year. The reception of the new compact cars (BW—Oct.17'59,p31)—and the excitement they have helped to generate for the whole range of Detroit's products—promises to result in domestic auto sales of something like 6½-million.

II. Money Sets Limits

Yet 1960 doesn't look like a year of one clean whoosh. That's because the U.S. government and the Federal Reserve Board are determined that 1960 will not be a year of inflationary price movements—and because U.S. industry is determined that 1960 will not be a year of inflationary wage settlements.

• **Tight Money**—To check inflation, the federal government will keep as tight a grip as it can manage on its own expenditures. Even though these may nevertheless rise a billion or two in 1960, the probability is that, with GNP climbing all year, tax revenues will exceed expenditures—and the net effect of the federal government on the economy will therefore be neutral or moderately deflationary. State and local expenditures, which probably will rise by about $3-billion, will offset whatever slight deflationary effect the federal budget produces.

The Federal Reserve authorities are going to keep money tight—at least until signs develop that the boom is softening. The main impact of monetary restraint will fall on housing. After running at an annual rate of more than 1.4-million starts through the winter and spring of this year, housing starts have already come down to an annual rate of 1.3-million.

At this point, only the optimists see 1960 as a year when 1.2-million houses will be started. Many others see housing declining to a rate of 1.1-million in the spring of 1960, then flattening out at about that level through the rest of the year.

On the other hand, credit stringency doesn't seriously threaten either capital spending or consumer buying in 1960. Industry increasingly rolls its own financing—out of profits and depreciation allowances. And even in the money market, it doesn't appear overly deterred by high interest rates (of which government, as industrialists like to say, pays half). And consumers appear to figure their borrowing on a basis of "Can I meet the monthly payments?" rather than "What's the interest rate?" (BW—Oct.17'59,p125).

However, the number of consumers who can answer the can-I-meet-the-payments question affirmatively is likely to shrink as the year wears on. Consumers are already committed to repaying 13% of their current income for installment debt, and that's an all-time peak.

III. Hard Bargaining Year

The determination of industrial management to resist inflationary wage settlements—a determination reinforced by their desire to hold onto or regain domestic and foreign markets against increasingly tough foreign competition—appears bound to make 1960 a year pocked with labor strife.

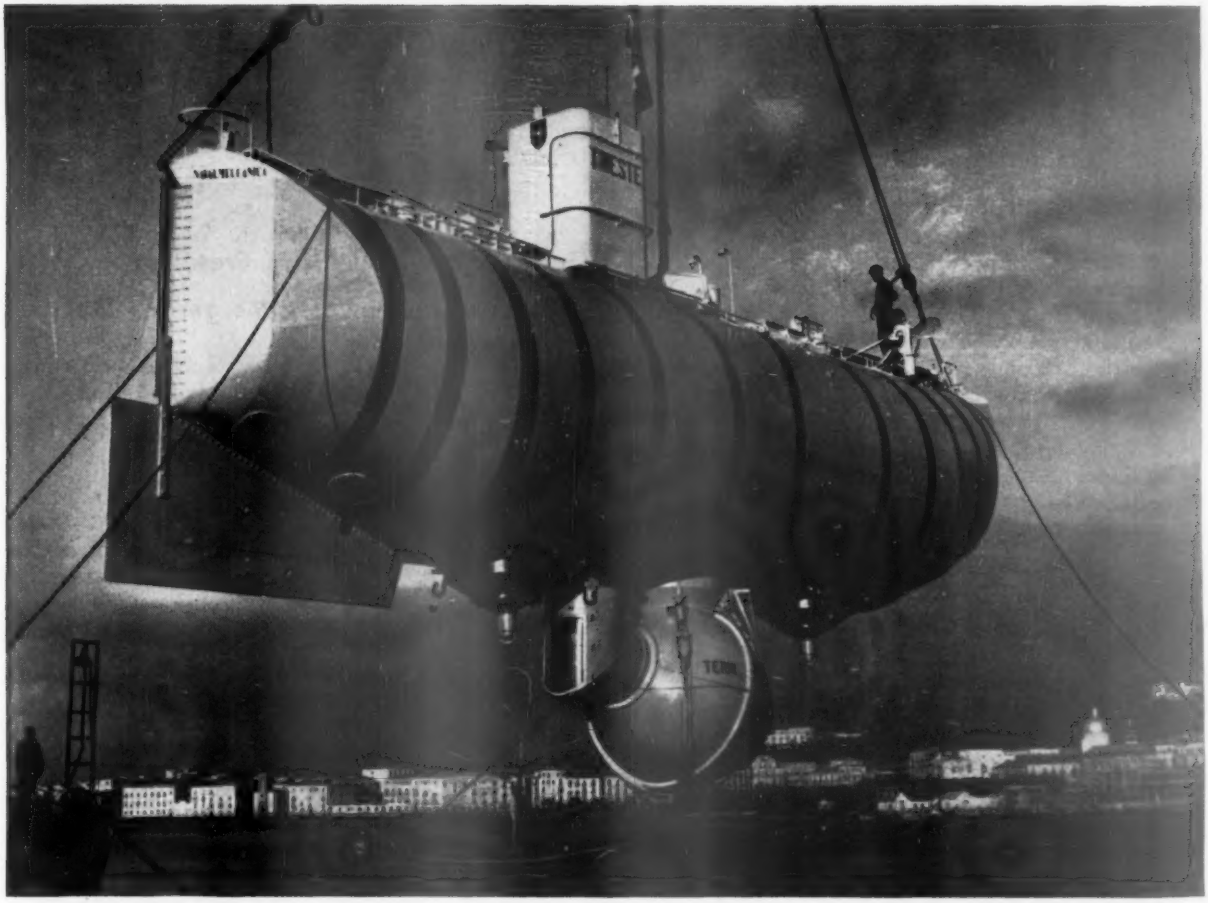
At the same time that management is getting tougher, so is labor. You can see it in the steel strike and the way the labor movement rallied to the support of the steel workers. From now through most of 1960, there will be a string of critical wage (and work rules) bargains to be struck—in steel, aluminum, railroads, canning, aircraft, paper, electrical products, and machinery.

• **Labor's Demand**—These collective bargaining contests will find labor determined not to be thrown for a loss at a time when business is expanding and, in many lines, profits are rising. Previously in the postwar period, labor has been able to make big gains by pushing on an open door. Now that the door has been barred, labor relations are bound to be rougher than at any time since before World War II.

Yet there is nothing in the offing remotely as disruptive as the great organizing strikes of the late 1930s—or even as the great steel strike of 1959.

• **Still Joyful**—Labor strife and tight money will take some of the joy out of business in 1960. They will help to moderate the boom. But they won't dump it. 1960 will be a year of ulcers—and of all-time record output.

And after 1960? The stock market will be worrying about 1961—and therefore may not put on a very spectacular performance. But it may well turn out that the sawtooth peculiarities of 1959 have upset the economy's timetable and structure so much that the already widely advertised 1961 recession is considerably less than a certainty.



Bathyscaph "Trieste", looking like something straight out of Jules Verne, has already made more than 50 scientific voyages to the ocean depths. High-strength nickel-chromium-molybdenum steel protects occupants of spherical cabin from underwater pressures up to 600 atmospheres, or nearly 9,000 pounds per square inch.

Built to explore an unknown world

How nickel alloy steel guards explorers against the crushing pressures of ocean depths

The bathyscaph, a deep-sea vessel invented by the Swiss professor, Auguste Piccard, is really two vessels. One is "Trieste", now used by the U. S. Navy off the coast of San Diego, California, and the other is F.N.R.S. 2-3, now used by the French Navy. "Trieste" has been down more than 50 times and once descended more than 12,000 feet below sea level.

At these depths, water pressure would crush a conventional submarine. But the bathyscaph is not so vulnerable . . .

Its cabin, hanging under the ship's hull like a giant bubble, is specially designed, using high strength nickel-chromium-molybdenum steel three and a half inches thick. This steel bubble, weighing eleven tons and nearly seven feet in diameter, is large enough to hold two men in comfort — *and safety.*

Problems solved. In perfecting the bathyscaph, its designers naturally ran into many problems. But one by one they overcame their difficulties. And quite often it was with the help of Nickel . . .

This is especially true of the Nickel which is part of the nickel-chromium-molybdenum steel of the cabin. They have Nickel, too, in the stainless steel of vital instruments, among them those in the ballast releasing system. And they also use Nickel in electrical resistances which operate as thermometers for water temperature.

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In Business

• • •

British Promoter to Sink $25-Million In Grand Central Office Building

Jack Cotton, British real estate promoter who is redeveloping London's Piccadilly Circus, is investing $25-million in the proposed $100-million Grand Central office building in New York.

It will be one of the biggest British investments in the U.S. since the war.

Cotton's offer to invest was on his own initiative, said Erwin S. Wolfson, who is promoting the building.

The building, adjoining Grand Central Terminal on the north, will rise 57 stories directly above the railroad tracks. It will have 2.4-million sq. ft. of floor space.

• • •

Three TV Networks Respond Three Ways To Congressional Quiz on the Quizzes

Rep. Oren Harris this week rang down the curtain on the first act of his Congressional probe of television quiz scandals—with the production set to resume early in November. Meantime, the three networks took three divergent courses:

Columbia Broadcasting System, in the most radical move, prepared to jettison all big prize shows and uproot "misrepresentation" such as rehearsals of ostensibly casual programs and canned laughter for comedians.

National Broadcasting Co. indulged in a public confessional, then refused to follow CBS in clearing out all quiz shows. It vowed to devise "every conceivable safeguard."

American Broadcasting Co. in the fortunate position of having no quiz shows to cause scandal, is thinking of capitalizing on the publicity by picking up some of the programs its rivals dropped.

• • •

Army Loses Redstone Lab—Last Link With U.S. Space Research Program

The Army was stripped of its last role in the controversial U.S. space program this week in a move that bolstered the year-old National Aeronautics & Space Administration.

Pres. Eisenhower announced plans to give NASA the Army's Redstone Arsenal laboratory in Huntsville, Ala.—**with its facilities worth well more than $50-million and staff of some 2,000 scientists and engineers, headed by German-born Dr. Wernher von Braun.** This team shot the first U.S. satellite into space in January, 1958.

The transfer must be approved by Congress, but an O.K. seems certain.

The switch turns over to NASA the Army's research on Saturn, a project to develop a 1.5-million-lb.-thrust rocket booster made up of a cluster of North American Aviation's Rocketdyne Div. engines. This $104-million assignment had been the Redstone lab's biggest job for the past year. NASA has a companion project, Nova, under way on contract at Rocketdyne. The two may be developed competitively, or one may be canceled.

• • •

Getty's Skelly Oil Ousts President In Wake of Tidewater Merger Failure

John S. Freeman was ousted this week as president of Tulsa's Skelly Oil Co. by the controlling J. Paul Getty interests. Marketing manager Don H. Miller took over the post as chief executive officer.

Freeman, a production man who has been with Skelly nearly 37 years, was offered the board chairmanship but refused.

Industry sources believe Freeman's ouster was due to his having opposed, at least privately, the unsuccessful negotiations to merge Skelly with Tidewater Oil Co., which is also controlled by Getty (BW—Sep.26'59,p70).

Meanwhile, minority stockholder Philip S. Ehrlich of San Francisco threatened to sue the Skelly directors on charges of running counter to the interests of the stockholders.

• • •

Kenneth Cassidy Steps Into Bugas' Shoes As Ford's Industrial Relations Chief

John S. Bugas, head of Ford Motor Co.'s labor relations since 1945, has turned his responsibilities in that area over to another executive and will devote his efforts to Ford's international operations.

Bugas is succeeded as vice-president of industrial relations by Kenneth D. Cassidy, formerly group director of the Body Group, a manufacturing activity. Malcolm L. Denise, Ford's general industrial relations manager, labor relations, has been elevated to vice-president of labor relations, reporting to Cassidy.

The 61-year-old Cassidy is a veteran auto executive and one-time editor of the Michigan Manufacturer & Financial Record. Bugas has had the collateral responsibility of vice-president of the International Group since May, 1957.

• • •

Business Briefs

A new refining process that yields high octane gasoline from the heavy fuel oil and other residual stock was revealed this week by Standard Oil Co. of California. The process, called Isocracking, is keyed to a new and secret catalyst; in effect, it puts a larger percentage of the refinery run into the more profitable products.

Chance Vought Aircraft, Inc., has acquired majority stock control of National Data Processing Corp., of Dallas. Chance Vought is becoming increasingly active in the field of automation and electronics.

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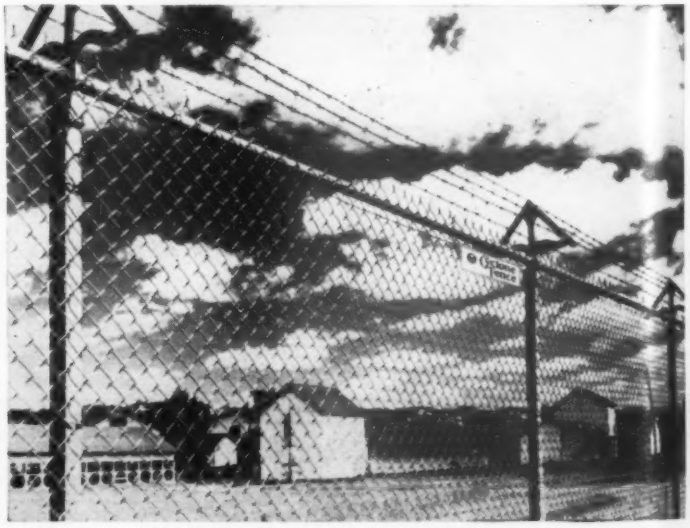
Fire Test. This raging fire was deliberately set to test the heat resistance of Cyclone Steel Fence . . . and that rugged steel fabric did not melt or fail. Should a grass or trash fire break out too close to a Cyclone Fence, there will be no damage.

Corrosion Test. More than 10 years ago this panel of Cyclone Steel Fence was installed 45 feet from the ocean. Even in this extremely corrosive atmosphere it is still strong and serviceable. Cyclone Fence owes its unusual corrosion resistance to its heavy coating of zinc.



Time Test. The fence shown here is a 25-year-old Cyclone veteran . . . still giving good service. Once Cyclone Fence is properly installed, it requires almost no maintenance. It continues to give good service, year after year.

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WASHINGTON OUTLOOK

WASHINGTON BUREAU
OCT. 24, 1959

The 1960 Presidential campaign hits a fast pace early.

On the Republican side, Gov. Rockefeller's moves to the Midwest this week, with Far Western touring to follow shortly, signal the earnest beginning of the New Yorker's bid for nomination.

Nixon's camp exudes confidence. The men around the vice-president claim no lock on the nomination. But they do figure Nixon has jumped out so far ahead that he ought to be "practically unbeatable" before the GOP convention assembles in Chicago next July.

The main source of Nixon's proven strength at this point lies in the GOP regular organization. But the trend in recent polls indicates his personal popularity with the public-at-large is also on the rise.

Rockefeller's problem—and the object of his cross-country travel—is, primarily, to loosen the Nixon grip on the party hierarchy. The governor's indicated strategy is to make himself better known at close range to key GOP powers while, simultaneously, bidding for proof of personal popularity.

The governor has one obvious advantage—a freedom to speak out on current problems and thus establish a well-defined political personality. Nixon will be compelled to do this with more delicacy. But his aides give assurance that Nixon—who has held aloof from intimate contacts with the press in recent months—will begin to speak up "for himself" by early next year.

An offsetting advantage for Nixon is his identification with the tremendously popular Eisenhower. Most White House staffers think Eisenhower will keep out of the gathering struggle for the nomination. But only a discernible strain in the close Eisenhower-Nixon relationship could weaken the presumption that the mere existence of the relationship benefits the vice-president.

The Nixon campaign organization looks impressive.

Two former National GOP chairmen are working for Nixon—Sen. Hugh Scott of Pennsylvania and Leonard W. Hall of New York. A third key man is Robert Finch of Los Angeles, a youthful Nixon protege who moved to Washington about a year ago to commence the organizing.

Several Eisenhower Cabinet members have volunteered for Nixon, according to insiders who identify them as Summerfield of Post Office, Flemming of Health, Education & Welfare, and Mitchell of Labor. And Atty. Gen. Rogers has, for years, been Nixon's political confidante.

—•—

On the Democratic side, a backroom power struggle is the prospect at the Los Angeles convention. None of the four Senatorial candidates—Kennedy, Humphrey, Symington, Johnson—has much of an edge. Gov. Brown of California so far has made no big national impression.

Party professionals would like to see a "new face," but time grows short for a buildup. You can pick up talk about such men as Frank Pace, the chairman of General Dynamics and a veteran of government service, or Rep. Chester Bowles, onetime Ambassador to India. But the talk lacks zest so far.

Launching of Lyndon Johnson's candidacy by the Texan's political

WASHINGTON BUREAU
OCT. 24, 1959

mentor, Speaker Rayburn, emphasizes the nature of the party's outlook. Johnson will have a 61-vote Texas delegation, but little else, as the convention opens.

Here's what the Johnson people are figuring: the convention will ultimately deadlock. Then a huddle of party powers will have to do some swapping. In this sort of situation, they see Johnson—the acknowledged master of negotiation and compromise—with a chance, albeit against the odds.

—•—

Search begins for a political compromise on federal aid to education. The House subcommittee on education has scheduled an unusual recess meeting—tentatively, for the first week of November—to determine how much flexibility there is in Democratic and Republican positions.

As the situation stands now Democrats in Congress sneer at the Administration plan, calling it "too little." Eisenhower regards Democratic proposals for direct aid grants in the range of $1-billion or more a year as "too much."

The President wants government's role to be minimal. This philosophy underlies the Administration's existing proposal in Congress for a joint federal-state guaranty of interest payments on construction bonds issued by the poorest school districts.

Pressures for a softening of Eisenhower's position are building up—and from within his own party and his own Administration. Note two recent bits of evidence.

The "Percy report" on Republican policy for the future acknowledges a need for government aid (BW—Oct.17'59,p34). Both in tone and substance, it is stronger than Eisenhower on this subject.

What makes this peculiarly noteworthy is that the school recommendations in the Percy report were drawn up by a task force headed by Eisenhower's Under Secretary of Health, Education & Welfare, Bertha Adkins.

Updated, official figures on classroom needs have been published since the Percy report by Mrs. Adkins' immediate superior, HEW Secy. Arthur Flemming.

A fresh call for federal action is implicit in the Flemming report. It shows a current shortage of about 140,000 classrooms—no improvement since a year ago. And it suggests the classroom deficit will worsen, unless steps are taken. It notes a 20% decline in dollar volume of school bonds marketed during the past 12 months, indicating a future decline in school construction while the school-age population continues to increase.

Bridging the political chasm may be an impossibility in 1960. Proponents of a federal aid program are heartened, nevertheless, by the House group's acknowledgement that only a compromise, bipartisan approach has any chance.

Eisenhower's stand becomes the crucial factor. Personally, he will influence the Republican legislative approach. This will determine how much, if any GOP compromising on this issue is to be done. And through the veto, of course, he can have the last word on legislation that does not suit him.

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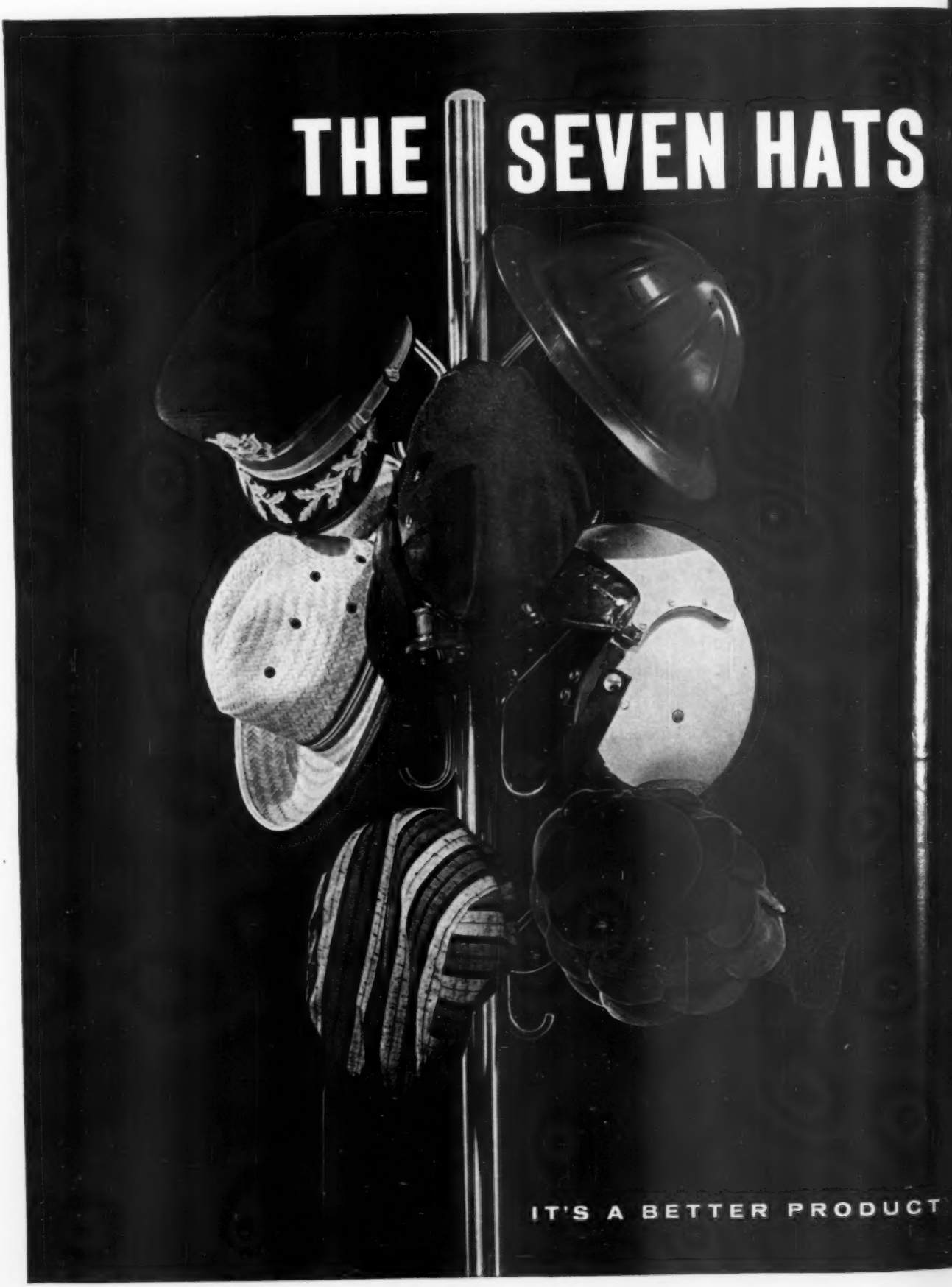
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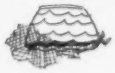
Wherever you live—wherever you work, play or travel—your life is touched importantly by Borg-Warner every day. It is through a vast number of divisions and subsidiary companies that this versatile corporation contributes vitally to the automotive industry and aviation to the oil industry and agriculture to national defense to industrial machinery to your life at home 

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UCT

WHEN **BORG-WARNER HAS A PART IN IT**

FINANCE

City Banks Lure Country Dollars

OFF TRAIN from New York at Mattoon, Ill., at 10:30 a.m., Chase Vice-Pres. Foster R. Clement, Jr., heads for appointment.

Foster R. Clement, Jr. (cover), a vice-president of New York's Chase Manhattan Bank—the nation's second largest in deposits (about $7-billion)—is a traveling salesman. The territory he covers is Illinois, where he solicits business for Chase from corporations and other banks. The doorbells he rings, on trips that keep him away from Chase headquarters near Wall Street up to 16 weeks a year, represent a broad cross-section of the state's economic activity.

One morning last week, for example, Clement stopped for a chat with officers at the National Bank of Mattoon. This bank, with assets of about $20-million, currently banks in New York with the Hanover Bank, a Chase competitor, and naturally Clement wants to win it away. He failed but felt visit was worthwhile.

Early that afternoon, after a 70-mph. dash to Champaign in a rented car and hurried visits with the four banks in town (pictures), Clement huddled with August C. Meyer, president of Midwest Television, Inc., the local Columbia Broadcasting System outlet, over plans for financing its expansion.

• **Successful Courtship**—The next day, in a town about 100 miles away, he got down to hard negotiations with officials of a major new corporate customer (estimated 1959 sales: $50-million) which

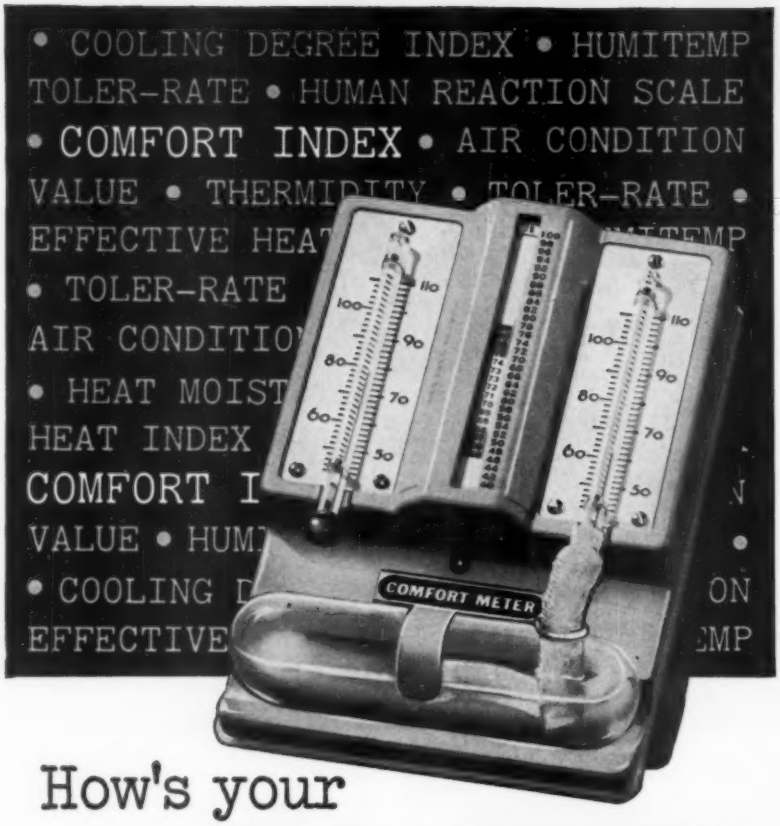
BY NOON, he is 70 miles away in Champaign in conference with Marc C. Norton, president of First National Bank of Champaign. Norton offered Chase a loan participation.

FEW BLOCKS away, at Champaign National Bank, Clement greets Pres. C. R. Torrence.

BOARD of Champaign's Trevett-Mattis Banking Co. meets with Clement, who advised them on reorganizing and remodeling.

IN LOBBY at Trevett-Mattis, Clement dickers with H. R. Bresee, a director of T-M and president of local sales finance outfit, over compensating balances required by Chase.

BEFORE NEXT STOP, Clement checks bank directory with Chase correspondents marked in red.



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***COMFORT INDEX**—One of many terms used to describe the exact point at which the climate of a particular area approaches an ideal combination of moderate temperature, low humidity.

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SANTA CLARA COUNTY • California

he has been wooing for 11 years. The account will involve not only loans and deposits for the Chase, but other banking services as well. Clement says that landing it was a stroke of luck; another New York bank had "antagonized" the company's management. But it was not all luck, for on his trips Clement had continued to make "friendly" calls that finally paid off.

Clement, of course, isn't the only banker out traveling the countryside. Chase, with 4,000 correspondents, regularly has about 100 of its officers on beats such as his. Other big banks in New York and other major cities deploy similar troops to bring in business—from banks, non-banking financial institutions, and corporations with hinterland headquarters.

I. Cooperative Banking

The business Clement and his counterparts solicit from banks is known as correspondent banking. Basically, correspondent banks are banks that agree to cooperate in handling business. Sometimes they do so because the transaction goes beyond one or the other's territory; in other cases, a smaller institution may need the facilities and knowhow of a big city bank. In practice, the relationship means deposits for the city bank. The First National Bank of Champaign (total assets: about $25-million), a typical country bank, keeps a deposit "in the low six figures" with Chase, one of its depositaries or "correspondents." Chase's earnings on these funds compensate it for services it performs for First National.

In the nation as a whole, these interbank deposits run to $12.5-billion, or about 5% of total bank deposits. They are concentrated in relatively few big city banks—for which they are an important source of earnings. Today, with the Federal Reserve keeping credit tight and with banks everywhere fighting to hold their own in deposits, the Chase and its rivals are wooing correspondents more strongly than ever, not only for deposits but for the income-producing loans that correspondent relations generate.

• **Genesis**—The need for correspondent banking stems from the peculiar way the U.S. banking system developed. From the first, banks were organized largely on local lines, because frontier communities feared domination by Eastern financial centers. They resisted every effort to organize the national branch banking systems found in most other industrialized countries.

So correspondent banking came into use—in the beginning, simply from necessity, because two banks had to cooperate in order to transfer funds from one city to another.

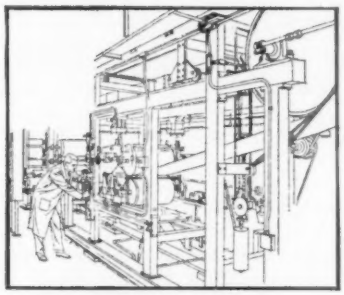
• **Worried New Yorkers**—In the corre-

"Cross Pollination"

GENETICS + SYNTHETICS + ADVANCED THINKING

STARCHES

RESINS



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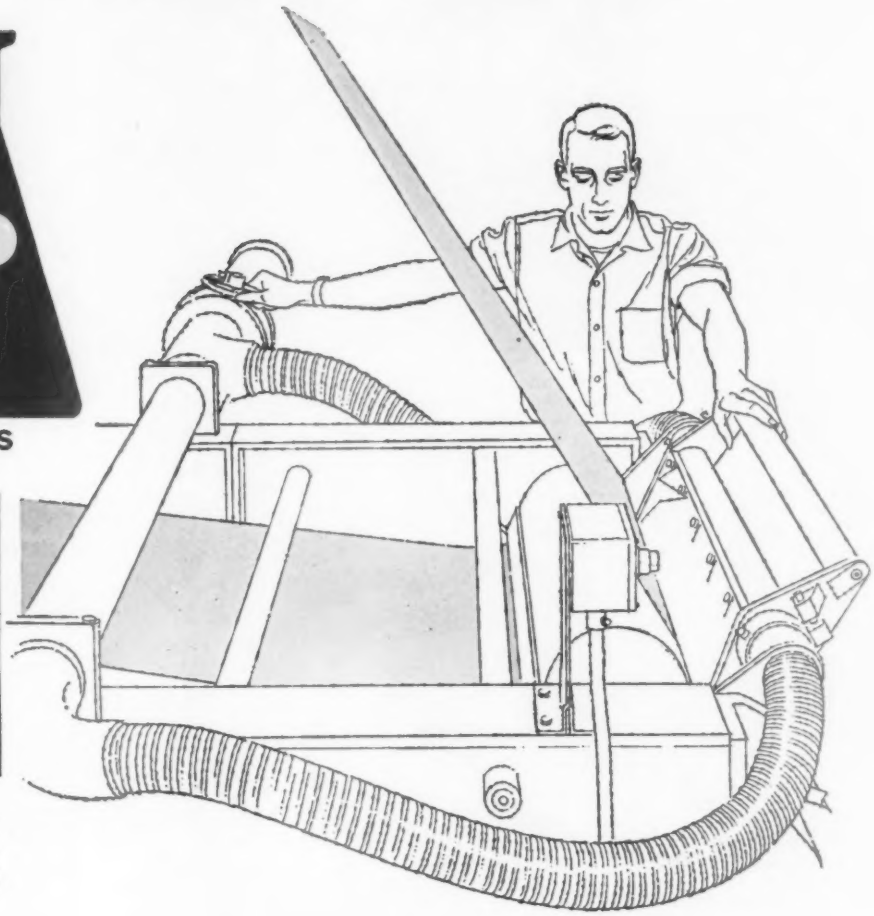

Improves the surface of Package Cartons

Pigment coated bleached board now has a better printing and gluing surface. This has been achieved by a unique "cross pollinated" starch-resin binding system. And at a price advantage due to low cost starch-resin combinations and ease of formulation.

Similar NATIONAL "cross pollinated" systems are improving coated publication papers, offset coatings, functional coatings and size press coatings.

What do we mean by "cross pollination" of genetics + synthetics + advanced thinking? NATIONAL has "cross pollinated" hybrid corn to produce unique strains . . . and has chemically "cross pollinated" corn starch to produce unique starch derivatives . . . and has "cross pollinated" them with vinyl acetate polymers and co-polymers in emulsion form—to achieve complete flexibility of formulation.

To which NATIONAL has added the "cross pollination" of advanced thinking in paper coating research and broad technical service.

All, to help the paper industry build new product features that become decided competitive advantages.

You'll find our coating binders and adhesives—everywhere!

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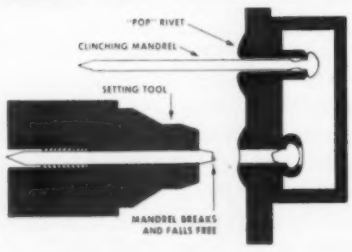
RIVETS

Assemble finely finished wood chair panels, enameled or painted metal sheets, "POP" Rivets save the surface. Setting tools can't slip. Burrs on fastener head and countersinking are eliminated.



HOW THEY WORK — "POP" Rivets are assembled on a precision high-tensile mandrel. Mandrel head is drawn into the reverse side of rivet with a setting tool. Mandrel head breaks off under tension clinching the rivet. Work is squeezed by compression — controlled radial expansion. Setting tools from $18 to $300.

"POP" Rivets set by compression without the turning action which tears the surface finish allowing corrosion to start. Fasten sheets as thin as .020 dead soft aluminum or 24 gauge steel without distortion. Use thinner materials without creating a fastener problem.

"POP" Rivets install and set from same side. Get this design advantage for your product. Set up to 1,000 an hour with unskilled help. 50% savings in installed fastener costs suggest your immediate investigation.

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UNITED "POP" RIVETS

spondent banking business, New York bankers trade on Wall Street's standing as the nation's prime financial market, where large banks and corporations must have connections. But New York has been steadily losing its competitive edge in banking. It holds only about 15% of the nation's bank deposits today, compared to some 30% in the 1920s. "In the old days," says one oldtimer, "prospective clients were expected to come to Wall Street hat in hand. Today we beat the bushes for customers."

There are many factors behind this competitive shift:

• Over the past 20 years, banks outside New York have been growing far faster than New York banks. They now solicit business on a national scale. Regional financial centers have taken big blocks of correspondent banking business that used to go to New York or possibly Chicago.

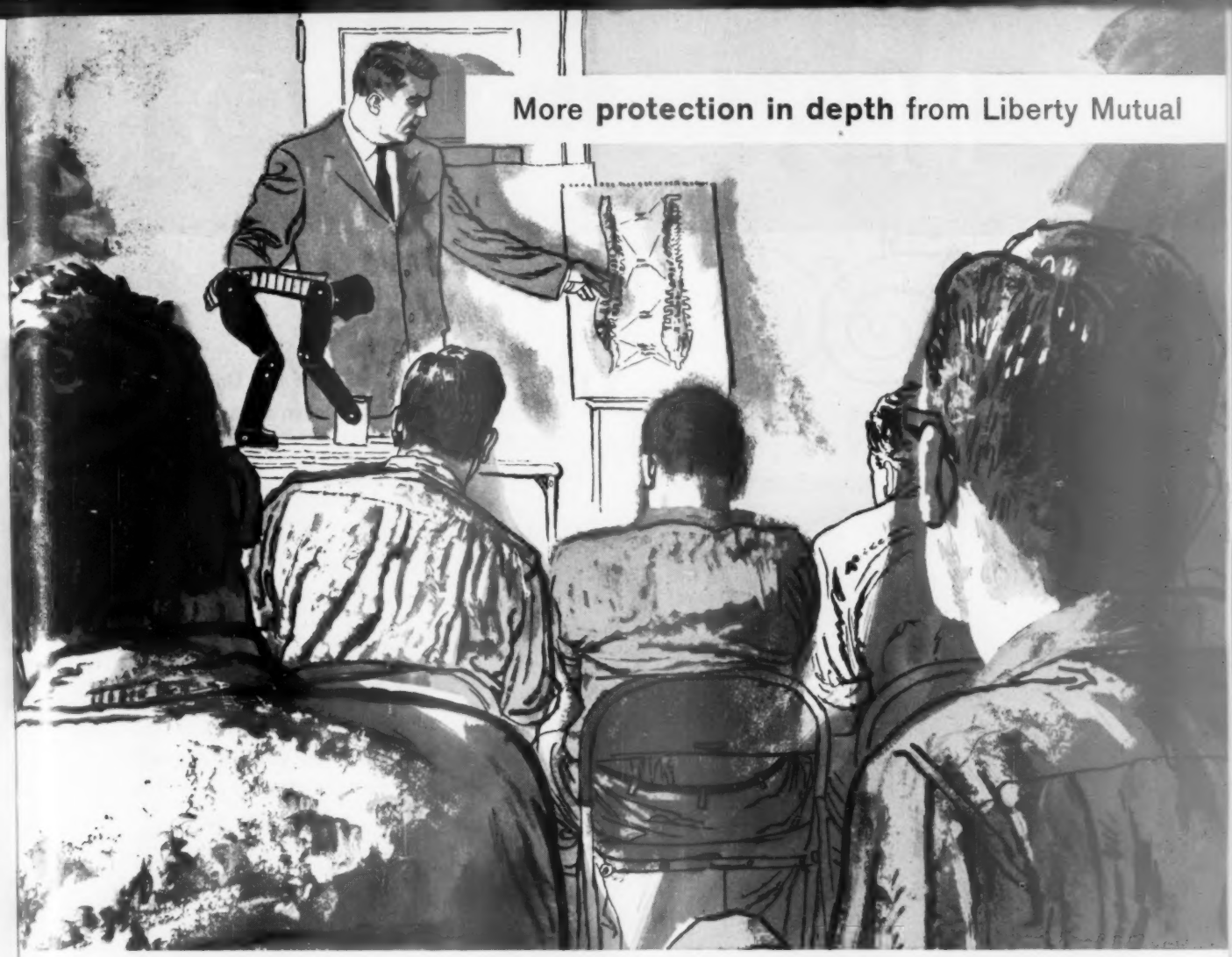
• Bank mergers and the spread of branch banking on a local level have cut sharply into correspondent bank balances held in New York.

• High money rates have made it increasingly attractive for banks and industrial corporations to draw down their demand deposits—which don't earn anything—and invest them in high-yielding Treasury bills or other near-term and nearly riskless investments.

• **Biggest of All**—Chase, with a long tradition as a banker's bank, leads the pack in correspondent deposits, both domestic and foreign. It has about $1.3-billion in funds from other banks, approximately $520-million of this total from domestic banks. First National City, third largest bank in the nation in deposits and second in New York, is very close behind, with Chemical Bank New York Trust, Morgan Guaranty Trust, Continental Illinois National Bank, and Bank of America farther back—each with total correspondent balance totals of about $500-million to $600-million. Bank of America, the nation's largest bank, lags in correspondent balances because it is located in California, away from maior financial centers, and as a statewide branch bank, it doesn't get much business from its local competitors.

New York banks dominate this list because of their location and because, prior to passage of the Federal Reserve Act in 1913, national banks were required to hold reserves in New York. (The legislation created 12 Federal Reserve Banks to take over the job.)

"There's a tremendous amount of inertia in a correspondent relationship," says William H. Miller, senior vice-president of the Hanover Bank, who notes that Hanover has about 700 banker's accounts that are over 50 years old. He adds: "There has to be something drastically wrong before a bank will



Lifting Robot helps Liberty Mutual safety engineers dramatize back injury hazards for plant foremen. Liberty offers numerous other visual aids in the supervisory training program.

New way to raise your production levels and lower your compensation costs

Back injuries are still a major industrial problem. They cause suffering, slow down production and boost the cost of your compensation insurance. To help policyholders curb these injuries, Liberty Mutual's safety engineers instruct plant supervisory personnel in proper lifting techniques.

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Protection in depth has helped make Liberty the nation's largest writer of compensation insurance. Last year, it also helped us return $4.8 million under retrospective rating plans and $18.1 million in dividends — $22,900,000 savings to our compensation policyholders. More than that, we helped many policyholders earn experience rating credits which will reduce their future premiums. Liberty Mutual policyholders also enjoy premium discounts allowed under rating plans in the amount of a little more than $3 million.

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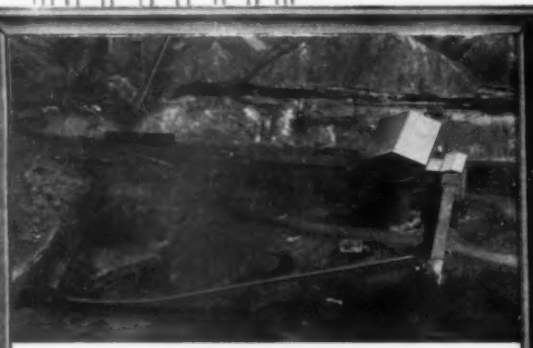
HAULS OF

HERE ARE on-the-job stories of five United States Rubber Conveyor Belts, taken from "U.S." belt records in the coal mining industry.

These belts are just some of the "U.S." standouts which demonstrate, year after year, why "U.S." is the world's largest producer of conveyor belts.

For steady, day-in and day-out dependability in conveyor belting, it always pays you to secure the advantages of "U.S." Engineering. "U.S." Engineers work directly with "U.S." Distributors or original equipment manufacturers to assure their obtaining the right belt recommendations for each type of conveying.

The most comprehensive belting engineering information in the industry is available through your "U.S." Distributor. It will pay you to check with him.



U. S. CONVEYOR BELTS

"A revolution in strip mining," says superintendent, "U.S. Conveyor Belt helps us save $1500 per week."

The Will Scarlet mine near Stonefort, Ill., has an outstandingly successful use of the first overland belt conveyor in a strip mine. The conveyor belt system, using a U. S. Giant® Belt, reduces the number of trucks, eliminates extra roads and high maintenance costs. The belt makes possible economical stockpiling for continuous operation: miners can continue working without a tipple operation—or the tipple can produce without a mining operation. The system can be moved to any location on the 3,000-acre tract. As the pit progresses overland, more lengths are simply added to the belt. "Maintenance costs are very low. Our savings are $1500 per week. We intend to install additional 'U. S.' Belting soon." *Another Three-Way Engineering Triumph.*

"After 20 years, 'U.S.' still gets the replacements," says plant foreman

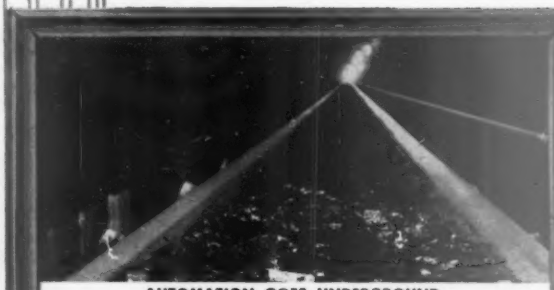
Mr. James Campbell of Guyan-Eagle Coal Co., Kelly, West Va., knows why Guyan-Eagle has been using (and replacing with) "U. S." belts in their 5 mines. In the words of the company's own officials, "U. S." Belts are:

"The most dependable in our experience."
"Resistant to abrasive action of rock."
"Strong, durable—maintenance is minimum."

FAME

40,000,000 tons of washed coal

This is the minimum tonnage expected to be hauled in an estimated 12-year life by the main "U. S." belt. Installed in U. S. Steel's Robena Coal Mine, Uniontown, Pa. Robena is three mines, serviced by the same preparation plant. It is one of the largest coal-producing units in the nation. A single U. S. Rubber slope belt (installed 1953) conveys all the washed coal, amounting to over 20,000 tons a day. An earlier "U. S." Belt (installed in 1951) conveys coal to the blending bins.



AUTOMATION GOES UNDERGROUND

"U. S." Belts help make foolproof the push-button conveyor system in the Dana Slope Mine of Amherst Coal Co., (Rensford, West Va.).

Limited storage capacity, both inside the mine and on the surface, makes it mandatory that this slope conveyor operate without stoppage. So Amherst, knowing the "U. S." reputation for dependability and long life, selected a 42" U. S. Giant 6-ply YN belt. Operating since 1952, it has given completely trouble-free service.

Coal crosses the river on a belt 3870 feet long

Jones & Laughlin preparation plant at La Belle, Pa., is one of the world's largest. Here outputs from Vesta and Shannopin mines are combined.

Coal from the Vesta is carried across the river on a 3870-foot U. S. Rubber Conveyor Belt supported by the world's longest belt conveyor suspension bridge. This belt (actually all the belts in the system are "U.S.") has been operating since 1948 without a breakdown. In these eleven years it has carried a total of 44 million tons so far.

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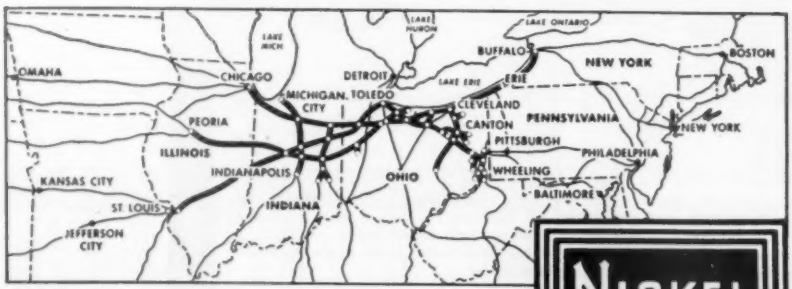

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make a change." And another banker observes, "It may take 10 years to land a new correspondent, but then you probably have him forever."

• **Special Services**—In return for putting handsome balances on deposit, country bankers get a whole host of services from their big city cousins—some of them strictly banking operations, some that go far beyond the line of duty. A number of country bankers keep substantial sums on deposit in New York because they are treated like VIPs on their visits to Manhattan; they get everything from choice theater tickets to escorts for their daughters. Says one New York banker: "You name it and we'll do it."

Clement recalls that a country banker once wrote asking for two drum majorettes to appear in a convention parade. It seems that a local American Legion Post band was due to appear in New York but couldn't afford to send the girls and their chaperones. "Some banks might have thrown that letter away," says Clement, "but we didn't, and we found the girls—one on Long Island and the other in New Jersey." He adds: "If you think any other bank will ever take that account away from us, you're crazy."

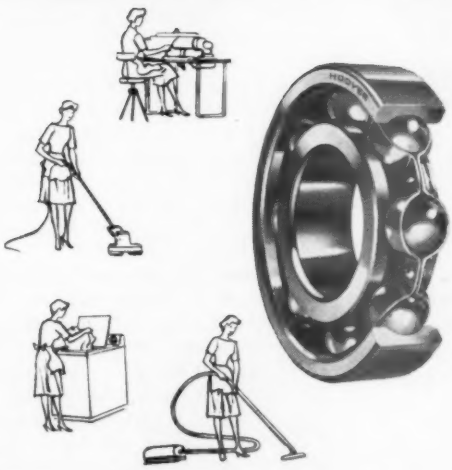
• **Bread and Butter**—The personal touch is important in correspondent banking. But the main reason that country banks are willing to leave big balances in the cities is the bread-and-butter services they get:

Check clearing. Banks in New York and other major cities have departments operating 24 hours a day, seven days a week, receiving, sorting, and routing millions of checks every day. Country banks with membership in the Federal Reserve could use the Fed for clearing. But, according to a survey by the American Bankers Assn., most don't. "We use our correspondents," says Marc C. Norton, president of the First National Bank of Champaign, "because we get faster, more reliable service."

Safekeeping of securities. By keeping their securities in the vaults of big banks in New York, Chicago, or other centers, the country banker can save time and money. Stocks and bonds don't have to be shipped; transactions can often be settled by moving certificates from one drawer in the vault to another.

Loan "participations." When a local bank finds itself unable to satisfy the credit demands of a customer, usually because the customer wants to borrow more than the bank is legally allowed to lend, it will offer part of the loan—a "participation" or "overline"—to its big city correspondent rather than share it with local competition.

Security trading. Country bankers lean heavily on the savvy of the money market banks. "We couldn't manage our bond portfolio without help from



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our Chicago correspondents," says William H. Patton, president of the First National Bank of Springfield, Ill. Patton, like other bankers in his area, does his most important correspondent business with Chicago, but he maintains sizable balances with Chase and Morgan Guaranty in New York and feels free to check with them about market conditions.

Not all correspondent deposits depend on services. There are still thousands of small country banks, and a few city ones as well, that don't belong to the Federal Reserve System. These banks have to hold required reserves somewhere—often in New York or Chicago. Unless the bank happens to be located close to either of these cities and can use the accounts for clearing, these balances lie fallow, while earnings pile up for the banks that hold them.

II. Recruiting More Loans

The real drive behind Clement's drumming is the non-bank business generated by a well-oiled correspondent system. Almost invariably, a national corporation—one that needs a New York banker to conduct its business—will have officers serving on the board of the local bank. Thus, the Chase's relationship with the A. E. Staley Mfg. Co., food processors of Decatur, Ill. (1958 sales: $157-million), isn't hurt at all by the fact that Chmn. A. E. Staley, Jr., is also on the board of the Citizens National Bank of Decatur, a Chase correspondent.

Once a corporation grows big enough, it can't depend solely on a local bank—and its correspondent connections. Instead it needs a direct connection, and a big city correspondent who has done business with it through a local bank has a big edge. The relationship between Chase, for instance, and Staley is a direct one. "Staley is simply too big for the local boys to handle," says Clement.

• **Required Percentage**—When corporations such as Staley borrow directly from the Chase, they're expected to carry "adequate" compensating balances (BW—May30'59,p57). According to Clement, "We never tell an industrial corporation to keep specific amounts on deposit. What we ask for is our fair share of the company's cash in relation to the services we provide." Clement admits that he spends a lot of his time in the field fighting the notion that Chase is a "20% bank," requiring borrowers to keep 20% of their loans on deposit.

But 20% is the rule for finance companies, which must keep 20% of any line of credit on deposit, whether borrowing or not. It's also the rule for most participation loans, where the compensating balance comes from the corre-

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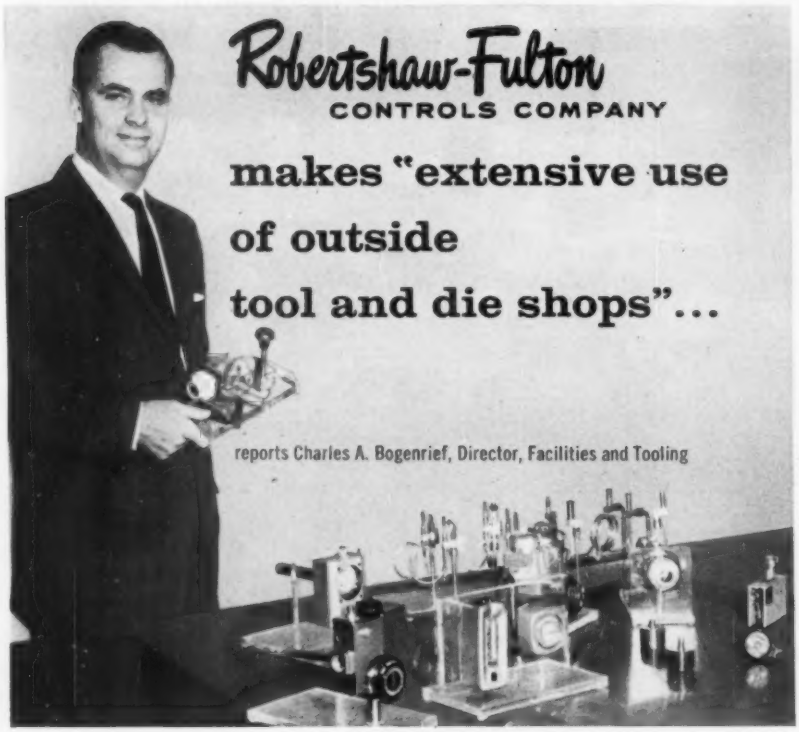
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makes "extensive use of outside tool and die shops"...
reports Charles A. Bogenrief, Director, Facilities and Tooling

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It pays to go outside for special tooling and precision machining

spondent bank rather than from the company borrowing the money. In any big participation loan, though, a local bank may call on more than one big city bank for a share. In such cases, the size of the compensating balance the local bank must provide is subject to negotiation, depending on the extent of the services it demands from its city correspondents.

• **Profit Potential**—It's to out-of-town corporate business that bankers in New York—blocked from local expansion by restrictive branching laws—are looking for much of their growth. Moreover, for banks such as Chase and First National City, with extensive branch systems inside New York City limits to maintain, the national accounts are by far the most profitable.

Though Chase's U. S. department, which handles the national accounts, has only 25% of the bank's $7-billion deposits, it makes 40% to 50% of the bank's total loans and accounts for about a third of the bank's net income, according to Walter E. Dennis, executive vice-president in charge.

Moreover, in the rising wave of direct overseas investment by U. S. corporations, New York bankers see a potential for substantial expansion of their out-of-town activities. Most of the big New York banks have offices overseas and a corps of experts to help a domestic corporation thinking of doing business in foreign countries—something most out-of-town banks lack.

• **Important Man**—With banks all over the country fighting hard for national business, both from banks and corporations, the big banks are stressing service and more service in their efforts to gain new customers. Chase, for example, has recently started emphasizing its federal funds service (BW—Jun.13'59,p123), which helps correspondents adjust their reserve positions without having to borrow from the Federal Reserve. And it will give its correspondents free advice on how to remodel a branch or run an advertising campaign as well as providing other services.

But while the accent is on service, most bankers will admit that the key factor in winning or losing business—even in this era of scientific management—is still the personality of the man out in the field making the calls. Even here, though, the traveling salesman must be well up on such things as monetary policy and new production methods. Chase has regular briefings for all its drummers. But still it has to depend on a grass-roots touch. As Clement says: "A man has to be able to talk the language of these country bankers if he's going to get anywhere. He's got to remember faces; the president's wife's name, the names of his kids, and his secretary. It's the little things that count." **END**

"The shear pin's broken"

As easy to use as a telephone, the new "citizens band" radios provide two-way conversation wherever you are . . . with the help of Mallory precision components

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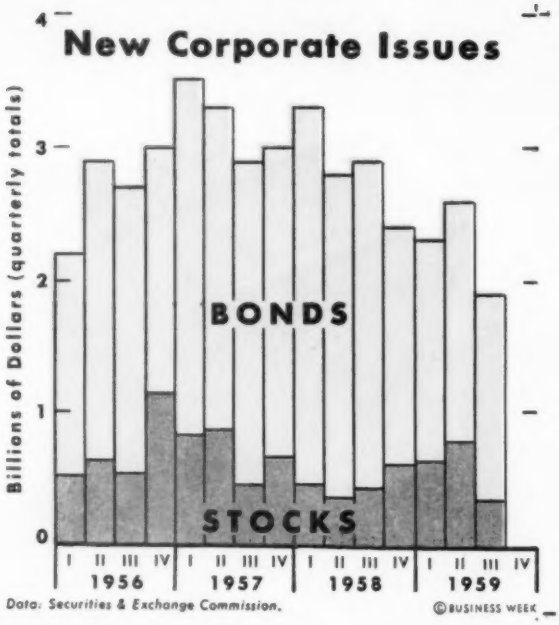

They're Shrinking This Year

With Lowest Quarter Since '54

Corporations issued only $1.9-million in securities in the third quarter, according to the Securities & Exchange Commission (table). It was the lowest quarterly figure for new financings since 1954's first quarter.

Corporate offerings in the first nine months of 1959 came to only $6.9-billion, compared with $9.1-billion a year ago. Even with an expected last-quarter burst, 1959 offerings should total less than 1958's $11.5-billion or 1957's $12.8-billion.

Underwriters attribute the low volume of offerings chiefly to high corporate liquidity and rising interest rates. But a number also say that the low volume reflects expectations of "moderate" outlays for plant and equipment during the coming year.

Common stock offerings declined in the quarter, reversing an upward trend that had started in mid-1958. The outlook is clouded for equity financing, underwriters say, as long as there's no settlement in steel.

Underwriters figure that private placements are becoming more fashionable; they accounted for 40% of third quarter offerings, compared with 30% for the full year 1958. Private placements, they explain, are favored when money is tight and public underwritings more risky.

• • •

Jacobs Affiliates Get Financing O.K.

Two subsidiaries of F. L. Jacobs & Co., bankrupt holding company formerly headed by financial operator Alexander L. Guterma, won court approval for a $1.5-million refinancing that should save more than $100,000 a year in interest costs.

A U.S. District Court in Michigan granted Grand Rapids Metalcraft Corp. and Continental Die Casting Co. permission to refinance existing debt—which carried a 13½% interest rate—that they owed to James L. Talcott, big New York factor. The new loans will be made by Michigan National Bank of Lansing and City Bank of Detroit.

• • •

Threatened Suit Under Sherman Act

Blocks Connecticut Bank Merger

The Justice Department's Antitrust Div. this week blocked a proposed bank merger by threatening an anti-monopoly action under the Sherman Act. This was the first time Justice has used this device against banks.

The two Connecticut banks involved—the First New Haven National Bank and Union & New Haven Trust Co.—said there was "serious doubt" that the government could sustain its charge that undue banking concentration would result from their merger.

However, the banks called off their plans because, they said, "it would not be feasible" to try to operate with the merger tied up in the courts. First National, for one thing, needs new headquarters—if the merger had come off, the banks would have used the Union building.

Robert A. Bicks, youthful chief of the Antitrust Div., was jubilant. He said that this action, coming on the heels of the blocking of the proposed Texaco-Superior Oil marriage (BW—Oct.3'59,p34), proves the effectiveness of the pre-merger threat as an antitrust device. He indicated that it's likely to be used again.

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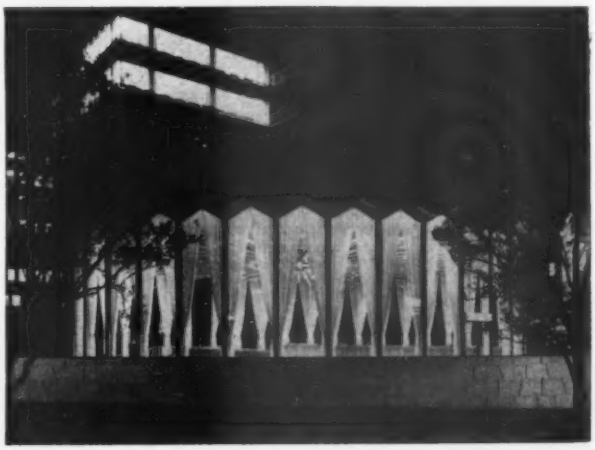

Well-Rounded San Francisco Bank

The newest look in bank buildings is American Trust Co.'s "rounded" branch (picture), which opened for business this week in San Francisco. It was designed by Skidmore, Owings & Merrill, who planned the glassy Fifth Avenue branch of New York's Manufacturers Trust. That building carried the trend away from the classic Greek temple type of architecture.

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and there's no new car like this Impala 4-Door Sport Sedan.

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Under the hood you have a choice of two standard engines that do marvelous things with mileage. There's Chevy's famed Hi-Thrift 6, the savin'est 6 in any full-size car, and a *new Turbo-Fire V8 that gets up to 10% more miles out of a gallon of regular.*

Yet, as economy-minded as this '60 Chevrolet is, it's come up with comfort that'll make you wonder why anyone would want to pay more. Its remarkable Full Coil ride—insulated from road shock and noise by *thicker, newly designed body mounts*—remains unruffled by even the roughest roads.

Engine impulses are even more effectively filtered from the driver by a *new clutch linkage.* There's also a convenient *new parking brake* that automatically returns to normal height after application. This accent on convenience even extends back to the *lower loading height of Chevy's huge trunk.* And adding to your sense of luxury is a choice of models, colors, and custom features that tailor every detail of the '60 Chevrolet into just the car you've always yearned for. Sixteen fresh-minted models, for example, and a choice of 24 engine-transmission combinations!

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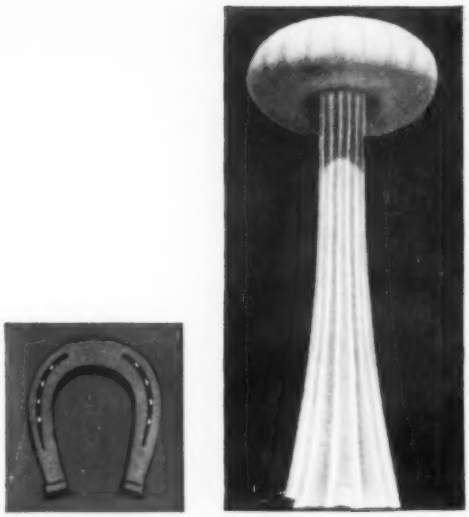

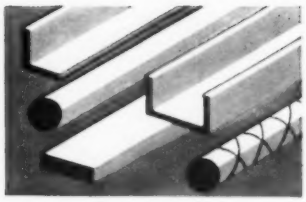

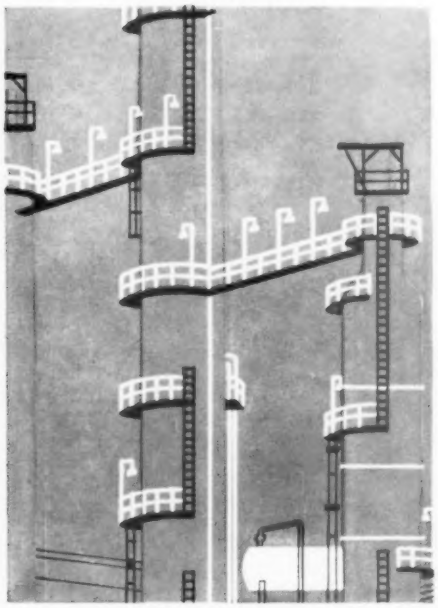

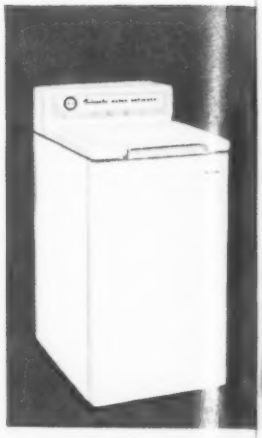

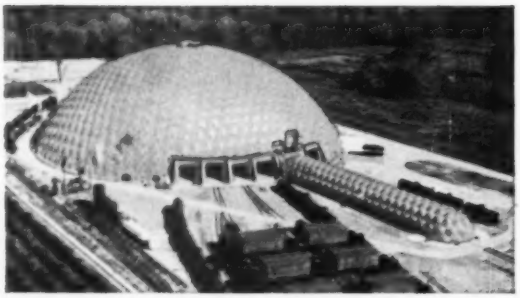

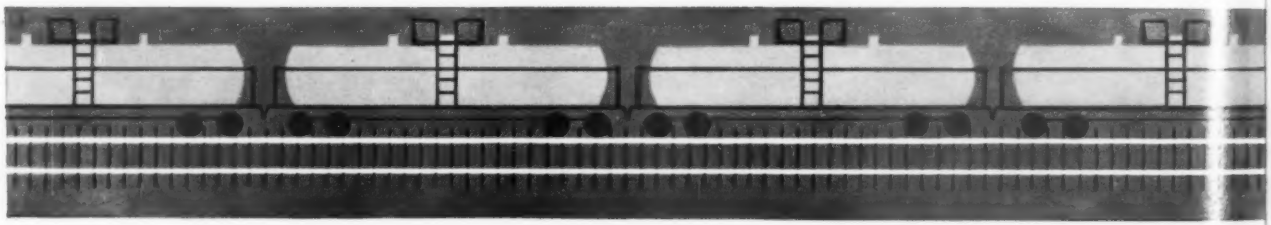

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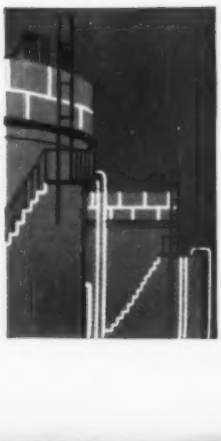

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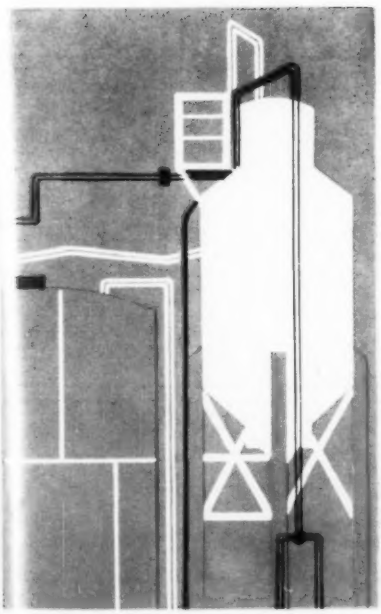

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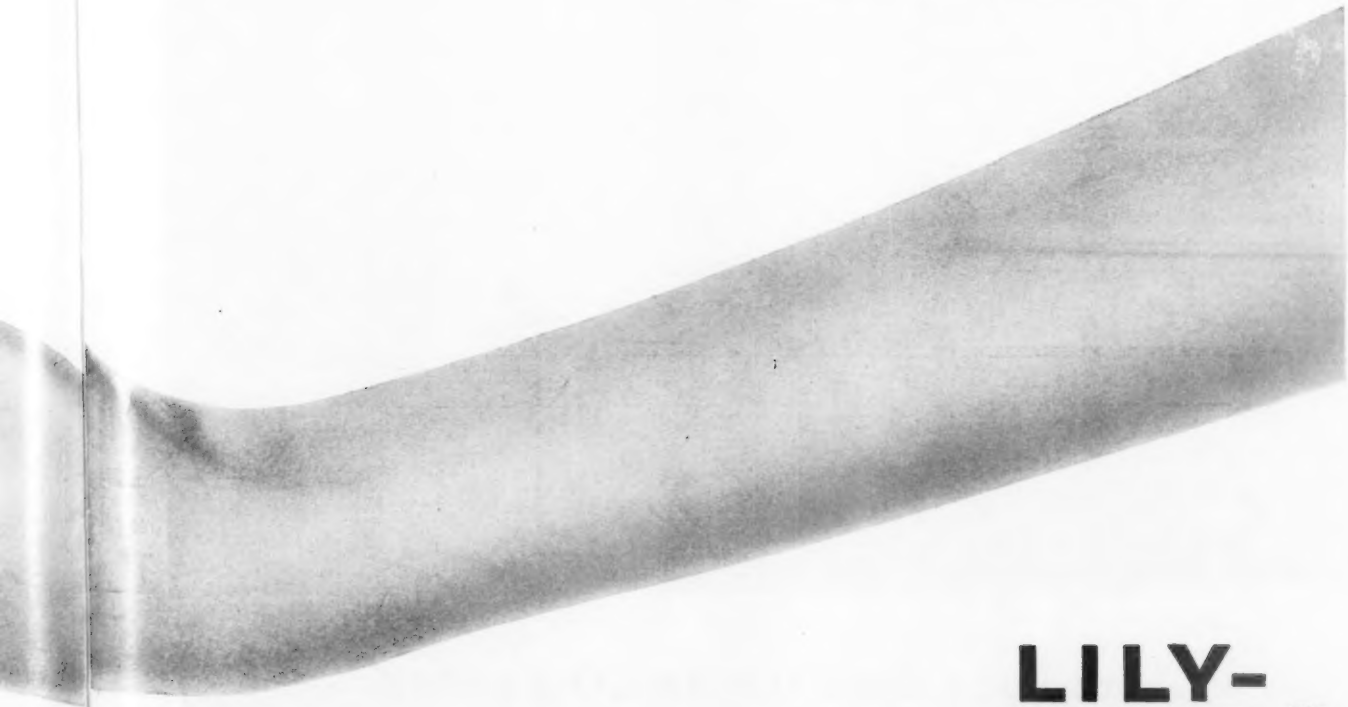

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PRODUCTION

Bakeries for Rocket Fuel

Under rigid safety rules, makers concoct solid rocket fuels like bread dough or macaroni—except that those foods rarely blow up in the cook's face.

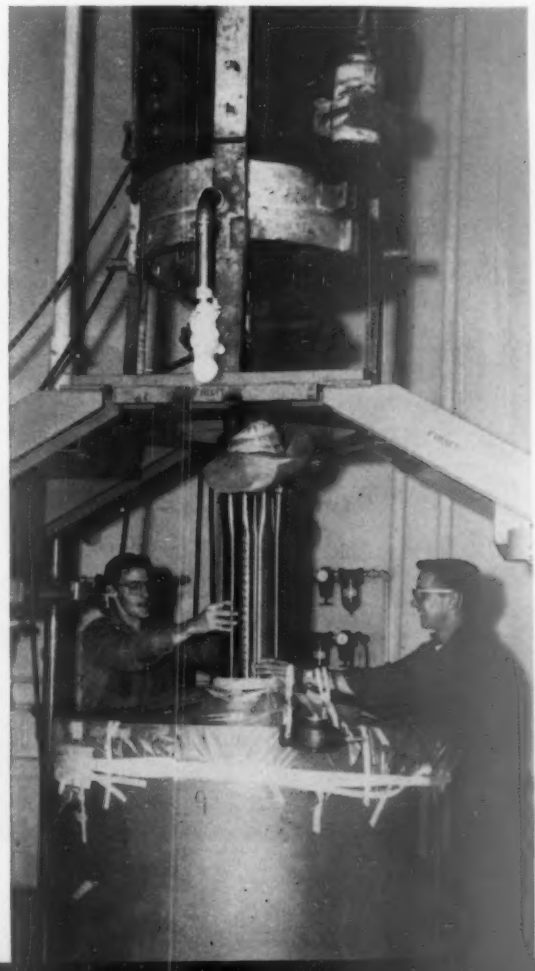
Solid fuels will probably be dominant in future rockets, say many missile men. They don't yet provide so much thrust as the theoretically less economical liquid fuels, but they will. Scientists are making vital discoveries of new ingredients, new ways of putting them together, and new ways of controlling burning (BW—Aug.15'59,p45).

Meanwhile, makers of solid-fuel rockets aren't waiting for the future. They're improving production methods so they'll be ready for the showdown against liquid fuels. Production of solid fuels probably doesn't yet match that of liquid fuels, though it is increasing its share. Solid fuels are being made for a variety of uses ranging from the small charges that eject a pilot from a jet fighter up to large fuel shapes for experi-

ON TEST STAND, an Aerojet solid-fuel rocket from the production line gets a static firing. Test frame must absorb thrust that, in use, would propel missile into space.

MIXER of Thiokol solid fuel is converted bread-dough mixer, run by **remote control. After a batch, man below is cleaning machine out.**

CASTING involves pumping fuel through "bayonet" pipes **from can on top to rocket casing in** "suitcase" can below.



OVEN with pneumatic doors at Thiokol Texas plant cures fuel in Sergeant rocket.

mental missiles such as the Minuteman.

According to one estimate, both types of propellant between them may take as high as 5% of total missile expenditures. At current rates, that would give both fuels a healthy $175-million market, with solid fuel taking something less than half.

• **Two Types of Solid**—There are two kinds of solid fuel in bigtime rocketry:

The composite fuel, a mixture of (1) a plastic that serves as both fuel and binder and (2) a powdered inorganic chemical that serves as oxidizer (out in space there's no oxygen to support combustion).

The double-base fuel, usually a mixture of nitroglycerin and nitrocellulose. Each of these is both fuel and oxidizer in one substance, but both are necessary to make a rocket's fuel mass—called a grain—with the required characteristics.

Both composite and double-base fuels also contain various additives to stabilize them and control their curing and burning rates.

The changes that may make solid fuels dominant may also bring the two kinds of solids closer together. For instance, aluminum powder may be added to double-base fuels the same way oxidizer is added to the plastic in a composite fuel. Or the oxidizer may be chemically added to the plastic molecule in a composite so that one substance is both fuel and oxidizer, as in a double-base. Such fuels are called hybrids.

For all kinds of solid fuel, the hard work is done in labs and on computers. That is the selection of the right ingredients for chemical and ballistic properties, and figuring the shape of the grain so it will provide the exact burning rate desired.

Once the design is set, a solid rocket engine is comparatively easy to make. It's just a casing, usually metal, with a fuel grain filling most of its space. It needs none of the complicated plumbing of a liquid rocket engine. Making the fuel itself resembles other production processes.

I. Making Composites

"Making composite rocket motors is a good deal like making bread." You hear this thought expressed often at Thiokol Chemical Corp. and Aerojet-General Corp., the two leaders in the field.

The oxidizer and the plastic are mixed in converted bread mixers. After mixing, the propellant is cast in the rocket case, just as bread dough is poured into a pan to make a loaf. Then it's cured by heating, just as a loaf of bread is baked.

But the rocket makers have progressed much faster than the bread makers. The bakers took a long time to switch from making dough in batches to continuous mixing, which goes back only five or six years. The missile companies, in business a much shorter time, have already adopted continuous mixing.

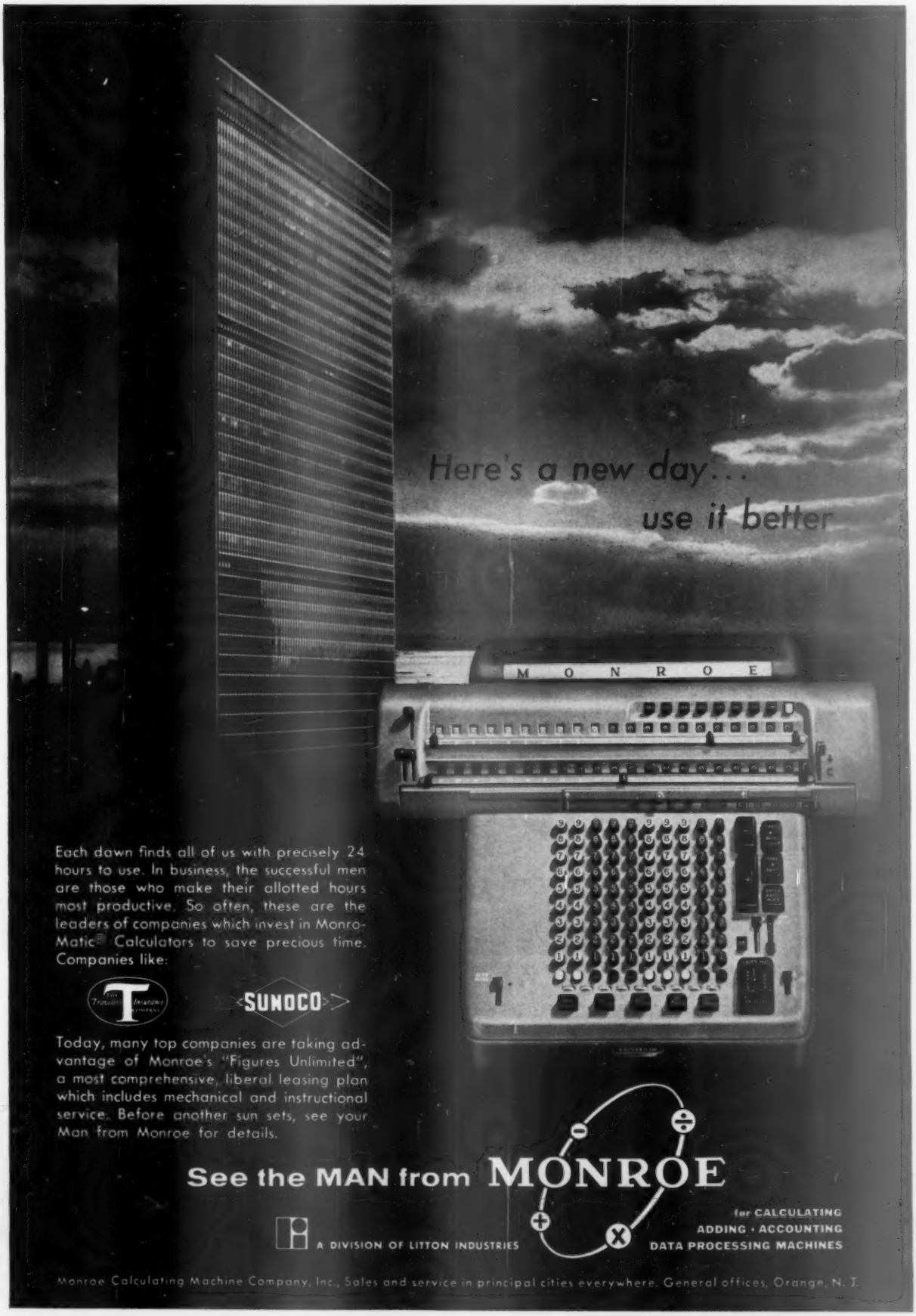
• **New Plants**—Thiokol has a continuous flow pilot plant already in operation at its Longhorn division in Marshall, Tex. Capacity at Longhorn is being doubled from 500,000 lb. to 1-million lb. of propellant a month, and Thiokol is evaluating continuous mixing for the whole plant. Aerojet is spending $2.5-million for its first full-scale continuous mix station at Sacramento, which will be ready in 70 to 90 days, according to Ben. F. Rose, manager of the company's architect-engineering division. It will make propellant for the Navy's Polaris missile.

Aerojet regards continuous mixing as a major improvement that will speed up production, assure better quality, save money, and provide greater safety. It expects the continuous mix plant to cost less, both for construction and for operation. The plant will have a capacity of 1-million lb. of propellant a month, compared with 625,000 lb. from five batch-mixing stations at present.

• **Simpler and Safer**—Only five skilled operators are required for continuous mix, against 28 for Aerojet's five batch mixers. The rejection rate is lower, and no propellant is lost as it is when the mixer must be cleaned after each batch. Safety is improved, too, because less than 200 lb. of fuel is in the continuous mixer at any moment, compared with 2,200 lb. in a single batch.

In Aerojet's operation, the flow of propellant from the continuous mixer

HITTING PANIC BUTTON, worker dives into safety tunnel at Aerojet's Sacramento plant. Button releases deluge to drown any trouble that might be developing.



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DEW LINE of radar stations built by W.E. for the Air Force in 32 months, has now been extended across the Aleutians. Hundreds of Bell System people bucked the Arctic to help build it.

NATIONAL DEFENSE

From the DEW Line in the Arctic to Air Force Titan ICBM sites here at home, Western Electric's telephone experience has been put to work in the nation's defense.

Telephone work may seem a far cry from the production of command guidance systems for Titan ICBM's or the building of the DEW Line. Yet, Western Electric was asked to lead the industrial teamwork on these and other important defense assignments precisely because of the special capabilities it developed as manufacturing and supply unit of the Bell Telephone System.

Our being asked to produce the Titan guidance systems – plus radar systems for other missiles, guns, bombs, planes and ships – stems from Western Electric's experience as a manufacturer of telephone communications equipment. An ability to turn ideas swiftly and smoothly into working realities has developed because of the close integration of our efforts with those of the Bell Telephone Laboratories.

Our being asked to build the DEW Line and provide management services for SAGE – gargantuan problems in logistics – becomes understandable in light of Western Electric's supply job for the Bell System: marshalling men and materials, coordinating the activities of thousands of suppliers, to provide the things needed for telephone service.

In short, Western Electric's experience in handling vast projects of great technical complexity – plus its ability to bridge the gap between research and operation–presents a ready-made package useful to the government.

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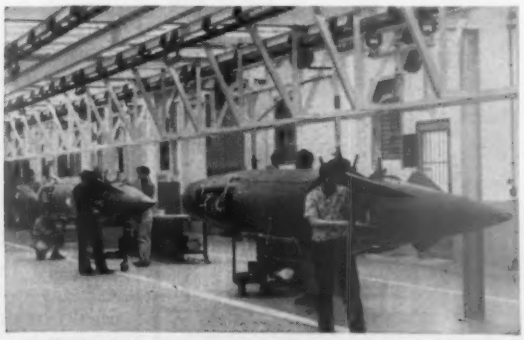
DOLLAR-A-YEAR JOB. At the request of the Atomic Energy Commission, Western Electric manages the Sandia Laboratories in Albuquerque, New Mexico. Mission: to help bridge the gap between research and production of complex atomic weapons.

SAGE NERVE CENTER. Western Electric is responsible for management services during the building of the Air Force's vital SAGE project, which is making the nation's air defense semi-automatic.



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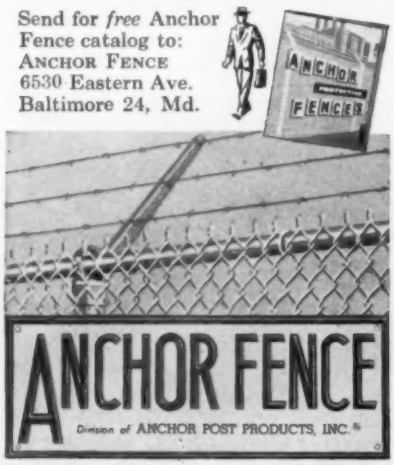

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will be drawn off in 2,200-lb. batches to fill the present transport carts for the trip to the casting and curing area. This is to simplify the integration of the new process into existing facilities. Eventually, Aerojet plans to do what Thiokol is already doing in its continuous pilot plant: that is, to run the propellant in a continuous stream from the mixer to the casting operation. Thiokol uses a screw-fed pipeline to push the fuel right into the rocket motors.

• **Fundamentals**—Basic production steps are the same whether you use continuous or batch mixing, whether your fuel is polyurethane, as on Aerojet's Polaris line, or polysulphide, as in most Thiokol rockets.

You start with the oxidizer powder—ammonium perchlorate is the most common—and re-grind some or all of it to get the desired proportion of coarse and fine powder. These are relative terms; the end product in both cases is particles of micron size.

Meanwhile, you pre-mix the plastic, a viscous liquid, with your additives. This is done in small mixers; a typical one resembles an outboard motor—its propeller is set perpendicular to the shaft. The oxidizer powder is poured into this pre-mix in the modified bread mixers, whose capacity normally ranges from 1,300 to 2,200 lb. in the batch system. The mixers assure that the tiny particles of oxidizer are evenly distributed throughout the plastic. The propellant comes out looking like a cross between cake batter and mud, ready for the rocket case.

• **Loading the Case**—The case has been previously cleaned with a vapor degreaser and lined with a .03-in. layer of the same plastic that's used in the fuel. This layer contains carbon black but no oxidizer. It bonds to the case metal more easily than the fuel would and in turn bonds easily to the fuel. Usually, no other bonding agent is required.

The propellant is pumped into the case by air pressure, through thin pipes called "bayonets." The propellant moves slowly through them so no air is trapped. Either before or after the propellant is poured—depending on its physical characteristics and the size of the rocket—a core is inserted in the case. It's usually star- or snowflake-shaped to make a hole in the grain, which will eventually burn from the inside out at a rate determined partly by the shape of this internal surface. The core is coated with Teflon or a similar substance to make it easy to pull out after curing—but a large hydraulic puller is still needed to get it out.

• **Ready to Fire**—After casting, the rocket goes to giant ovens for curing, usually by steam-heated air. Curing may take up to 72 hours, depending on the size of the charge and the nature of the fuel. Excess propellant is trimmed off,

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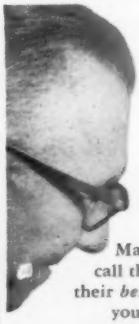

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. . . as you roam around Aerojet's 22,000 acres in Sacramento, you wonder where all the 7,000 employees are. For safety, they seldom gather in more than a handful . . .

(STORY on page 67)

the core removed, and the igniter inserted. Then the rocket is ready to go, after inspection by giant X-ray units and other means. Thiokol's Longhorn plant already has a special installation in which an X-ray picture of the fuel grain can be monitored on TV. Aerojet is now shaking down a $2.5-million X-ray installation at Sacramento. It expects the inspection of a single Polaris rocket motor to take about 30 hours—three hours for setting up, more than 13 hours to take 150,000 X-ray readings on the propellant, and another 13 to inspect the rocket case.

Other forms of inspection and testing go on at every stage of the process.

• **Splendid Isolation**—This doesn't sound too hard. But the difference between rocket making and bread making is that the rocket people must keep their "bread" from blowing up in their face. If it does blow up, they must keep damage to a minimum.

Almost all operations—except for transporting the rockets on giant monorails—are done by remote control, behind foot-thick concrete walls. Equipment using hydraulic or air pressure replaces electrical units wherever possible, to minimize danger from sparks. Separate operations are isolated from each other by hundreds or thousands of yards.

At Aerojet's Sacramento plant, every building is surrounded by revetments to isolate damage. Automatic switches cut off all power when a man enters an operational area. As you roam around Aerojet's 22,000 acres in Sacramento, you wonder where all the 7,000 employes are. For safety reasons, they seldom gather in more than handfuls. Aerojet's Rose estimates that safety requirements account for about 90% of the cost of a solid propellant plant.

II. Making Double-Bases

If making composite rocket fuels resembles the bread business, making double-base fuels takes its process from the macaroni business.

The nitrocellulose part of the fuel is made into a dough by putting in the additives in the presence of alcohol, acetone, or ether solvents; it is compressed into a block and then extruded through a metal die into macaroni-like strands. These are cut up into specified sizes, and the solvent is air-dried.

Of course, as Hercules Powder Co., the leading maker of double-base fuel, points out, this is also the way shotgun powder is made—and that isn't a food process, either.

• **Without Stirring**—In a sense, making double-base fuels is simpler than making composites, because no comparable mixing is required before casting. Hercules now casts in the rocket case itself; it used to use separate aluminum containers. The nitrocellulose pellets are poured in; then the liquid nitroglycerin is added, and a gelatinous mixture is formed right in the case. The rocket is heat-cured to speed up the jelling process.

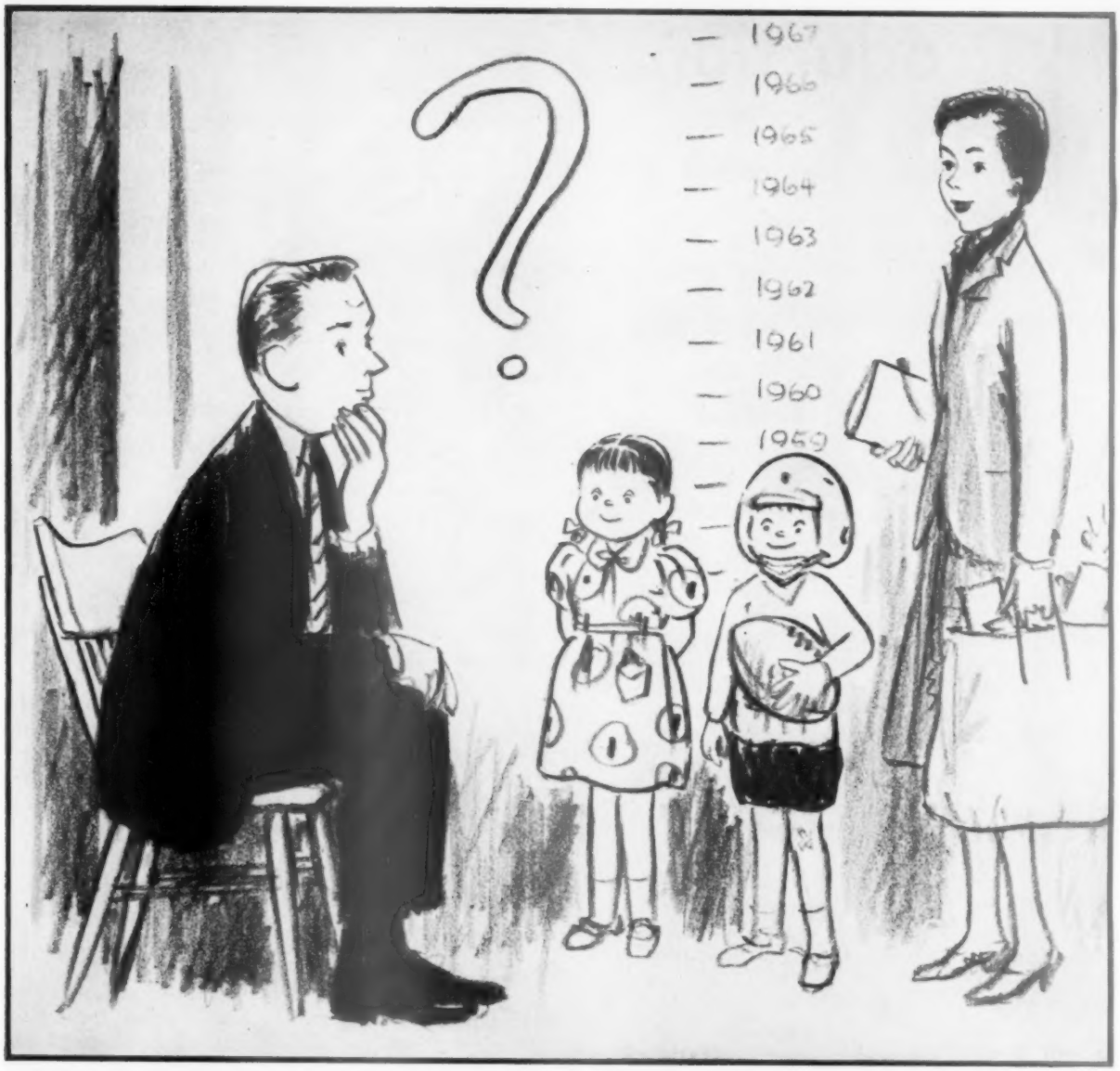
The only mixing that is done is to make 1-million-lb lots of the nitrocellulose pellets from the original 400-500-lb. batches. This eliminates any tiny differences between the batches, yielding a uniform product. For this reason, double-base fuels are not so well adapted to continuous production as the composites are.

• **Danger in Research**—Safety requirements are similar to those in composite fuel-making and gunpowder manufacture, though not everything is done by remote control. Hercules, which points to 7-million man-hours of production without a serious accident, says trouble is most likely to occur in research work before all controls can be established. The explosion early this month at its Kenvil (N.J.) plant probably originated in a research lab.

• **Handle With Care**—Makers of both composite and double-base fuels say new ingredients are unlikely to change present production methods. Some fuels are so combustible that they must be handled in inert atmospheres. This will mean adopting remote controls like those used in radioactive work to handle fuels and tools in enclosures filled, for example, with argon.

It's also possible that some future grains will be easier to make by extrusion—which used to be widely used—than by casting.

Atlantic Research Corp. is experimenting with such a propellant—a different type of composite that can be cured in just a few minutes. The fuel is propelled through the extruder by a screw that heats it a little, and more heat is added through a jacket around the extruder die so that the mix will reach the right temperature for curing at the moment it passes through the die. Grains of the desired shape could be extruded continuously and then inserted into rocket cases, which might be quicker than casting in the case. **END**



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Food, housing, clothing, health, education—just everyday living—all call for a steady income today. For protection, the average insured American family has $11,000 worth of Life insurance. Say that out loud and it sounds like a small fortune. And it is.

But it is, also, for the average American family, actually less than two years' income.

How long, exactly, would your insurance take care of your wife and family? Divide your Life insurance by your monthly pay and see just how many months it would last. Will it suffice to take your youngest child through college—or even high school?

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In Production

• • •

Electrolytic Cavity Sinking Method Helps Machine Hard, Exotic Metals

Electrical machining methods are playing a fast increasing role in the shaping of hard-to-cut exotic metals used in missiles and rockets. The newest is an electrolytic cavity sinking process developed by Anocut Engineering Co., of Chicago.

In essence, the process is the exact opposite of conventional plating, where a thin film of metal is deposited on another metal by electrochemical means. Instead of adding a metal, the Anocut machine erodes, or ionizes, it away. **The speed and accuracy of the machine are considered in the industry to be a considerable advance on earlier deplating, especially when it comes to fine work.** The machine can penetrate the toughest material at a rate of ¼ in. per min., and can cut a postage stamp area ½ in. deep in the same time. Its accuracy matches ordinary drilling and cutting operations.

The Anocut process, like other electrical machining, lends itself to cutting odd shapes, since the hole it makes is the exact reverse image of the electrode that ionizes the metal away.

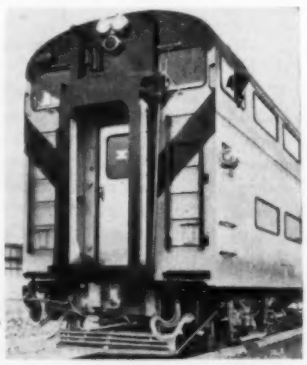
What's more, the electrode itself doesn't gradually erode away, which gives the deplating approach an advantage over the spark erosion method used by the Russians and the Japanese (BW—Dec.27'58,p67).

Anocut—which first got into business with a grinding wheel that combined electrical machining with conventional diamond grinding—**has put a $30,000 price tag on its new machine. The accompanying power supply unit will cost between $6,000 and $30,000, depending on size.**

• • •

Small Boon for Commuters: Service To Be Speeded by C&NW's Push-Pull Trains

Rail commuters are going to get something of a service break soon—at least in the Midwest. The Chicago & North Western Ry. last week demonstrated a new kind of **double-deck train whose locomotive pushes it into town in the morning and pulls it back at night, with no need for switching or loss of turn-around time.**



The trick is that some of the passenger coaches have control cabs from which the locomotive can be remotely controlled. On the inbound trip, the engineer rides the control cab of the lead car, while the unmanned locomotive pushes from behind. On the return trip, the engineer rides the locomotive.

For midday trips when traffic is light, coaches can be dropped in any number, so long as the end coach is one with a control cab. **The C&NW has ordered 36 of the coaches from Pullman-Standard Car Mfg. Co., eight of them with remote control cabs.**

Meanwhile, the Assn. of American Railroads heard a far more radical proposal—**the elimination of train crews altogether via automation.** An engineer from Union Switch & Signal Div. of Westinghouse Air Brake told an AAR meeting that electronic control of trains from central dispatching centers is now both possible and practical.

• • •

Bell Labs Prints Electric Wiring Directly on Ceramics With New Paste

Printed electric wiring can be put directly on a ceramic base without adhesives in a new process developed by Bell Telephone Laboratories.

Copper oxide is used in a finely ground mixture with glass frit—a compound of the elements that make glass, which are fused but not completely transformed into glass. **This paste is printed on the ceramic base with a silk screen printing device, in which the paste is forced through a silk mesh in a stenciled pattern.**

The printed board is heat-dried to remove solvents and fired in air at 750C to burn off the carrier material. This gives a pattern of copper oxide that is non-conductive. A second firing in an atmosphere of hydrogen, nitrogen, and oxygen reduces the copper oxide to metallic copper, which is conductive.

• • •

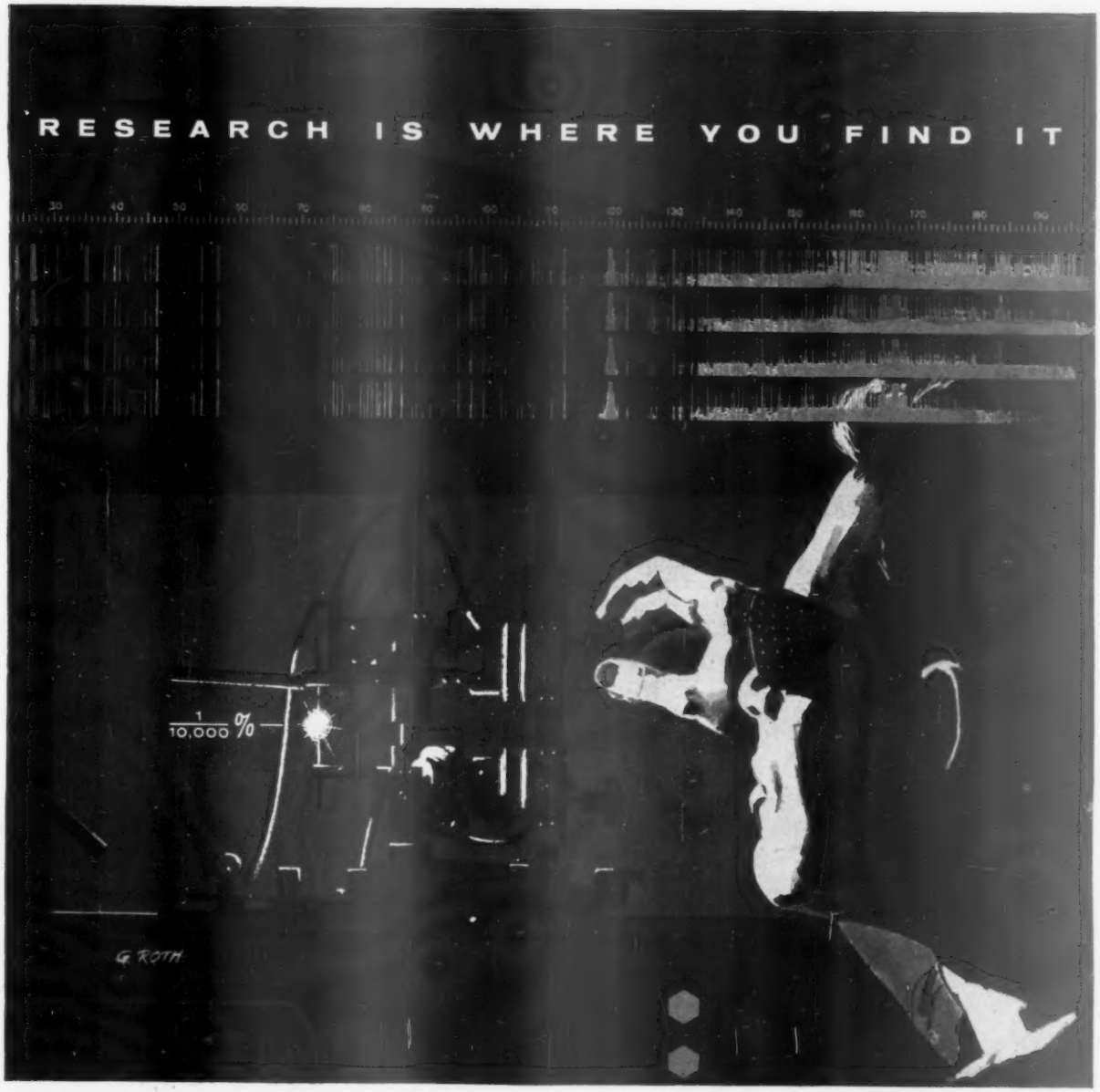
Electronic Metering May Change The Look of Roadside Gas Stations

Modern design and instrumentation techniques may be outmoding the gasoline pump. Bowser, Inc., of Chicago, last week demonstrated an electronic fueling system making it possible to install refueling hoses anywhere —in overhead racks or retracting into the ground.

Already, in many modern service stations, the actual transfer pump is situated underground beside the storage tank. The aboveground "pumps" contain only the bulky mechanical metering system that measures and displays the amount of gasoline going into the customer's tank.

Bowser's new electronic system goes one step further. Its metering and sales display units electronically measure the sale of gasoline, so **it will be possible to locate these units apart from the fueling hoses and separately from each other.** Each unit can be placed at the point most convenient to the dealer and the customer.

This flexibility of station layout is only one advantage of the Bowser system. **It is also expected to cut down the damage that errant motorists do to conventional service station pumps.** Since the Bowser system is electronic, it will also be possible for the larger stations to install data-processing equipment for their accounting and, perhaps, even to take over the processing of their charge account business.



The telltale wavelength

As little as 0.0001% of an unwanted "trace metal" in crude oil can cause a refiner to lose his temper . . . perhaps his shirt!

It may generate enough gas to choke his plant . . . drastically increase his catalyst requirements . . . or reduce yields of desired products to below the profit point.

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MANAGEMENT

Canco's Team of Men in Motion

MANAGEMENT committee at Bradley-Sun: from left, Thomas J. Prior, comptroller; Kenneth G. Michel, vice-president; C. L. (Bud) Alexander, vice-president and general manager; Richard H. McCarthy, sales director; Nicholas Marchak, vice-president.

The young quintet at the helm of American Can's Bradley-Sun Div. are dynamic small businessmen inside a giant corporation.

At American Can Co., the five executives in the pictures at left and right call themselves the angry young men—with more whimsy than accuracy. True, their average age is a relatively young 36, but they are not so much angry as individualistic and restless to get ahead.

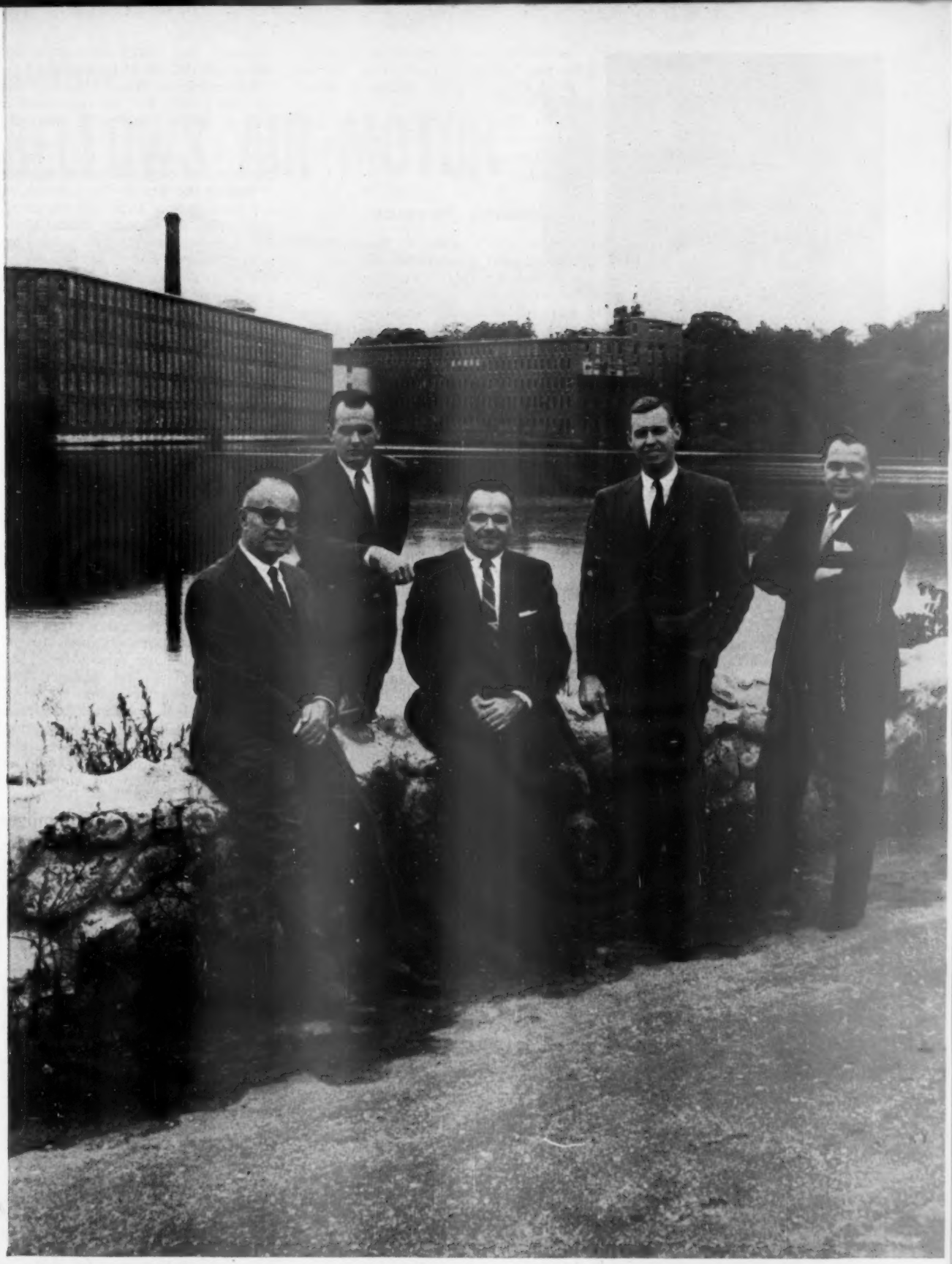
These five men run Canco's Bradley-Sun Div., which makes plastic and collapsible metal squeeze tubes and bottles for products from toothpaste to motor grease. Their management tactics are notable in several respects:

• They grew up in a small business—one of the two companies from which the division was formed—and they still apply small business principles within a giant corporation. The division's sales come to only about 1.5% of Canco's $1-billion-plus total.

• They make a lot of use of committees—beginning with the management committee on which all five sit. It meets formally once a month but

INEFFICIENT machinery worth $700,000 was scrapped in drive to cut costs at the ailing Bradley polyethylene tube plant, which the five were assigned to revive.

EFFICIENT air conveyor system was installed at Bradley plant to move plastic tubes between machines.



FIVE MEN inherited by Canco from Sun Tube brought modern ways to the old-fashioned textile mill that Bradley calls home.

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informally almost every time the group is together—on a plane trip, on the plant floor, or in the kitchen of one of their homes at 5 a.m.

• They all know the others' jobs intimately—likely as not, from doing the jobs themselves at some point in their careers.

I. Dramatis Personae

The who's who of Bradley-Sun's management quintet runs like this:

Claude L. (Bud) Alexander, 32, vice-president and general manager. In Canco councils, he holds equal status with the heads of the other divisions: Canco, Marathon, and Dixie Cup.

Kenneth G. Michel, 31, vice-president and manager of the division's Bradley plant in Maynard, Mass.

Nicholas Marchak, 37, vice-president and general manager of Sun Tube plant in Washington, N. J.

Richard H. McCarthy, 32, division sales director.

Thomas J. Prior, 47, division comptroller.

• **Corporate History**—The division these men head was created by Canco in 1958 by combing two companies the corporation already owned but was operating as subsidiaries—Sun Tube Co., which specializes in collapsible metal tubes, and Bradley Container Corp., the sole U.S. manufacturer of polyethylene tubes, the glamor child of packaging. Canco bought Bradley from Olin-Mathieson Chemical Corp. in September, 1956, and Sun Tube from Bristol-Myers Co. in December of the same year.

Both purchases were part of Canco's diversification in packaging—a program that stemmed in part from a federal court decision in 1950 holding it guilty of restraint of trade through long-term contracts and machinery-renting deals requiring customers to buy only its cans. After the ruling, Canco had to compete more aggressively with its packaging rivals; this meant, according to Pres. William C. Stolk, that "local managers had to be as nimble as if they owned their own factory." This policy was translated into autonomy for divisions—which now vie for sales with each other and run their own manufacturing.

• **Bradley in Trouble**—Alexander & Co. were at the helm of Sun Tube when Canco took over. Sun was doing quite well, but Bradley was another story, despite its lack of competition. The polyethylene tube had been overpromoted (BW—Nov.12'55,p66), and demand was far ahead of capacity. The sales department was scheduling production of 35,000 tubes a day in a plant with capacity for only 20,000. Machinery was complicated and unreliable, and so much hand finishing was necessary that direct labor costs were about half the cost of the product.

Canco tried to clean up the mess with its own people, but, although sales increased, Bradley was still in the red as much as 35% of sales in the summer of 1958. Canco's own staff wasn't experienced in running a small business.

• **Sun to the Rescue**—By contrast, the top men at Sun Tube had always run their own show under Bristol-Myers, which had concentrated on making and selling its own line of toothpaste and patent medicines. In fact, one reason for the sale to Canco was that Bristol-Myers wasn't interested in the tube business and the five were itching to expand. Their approach fit neatly into Canco's problem with Bradley; so, after forming the Bradley-Sun Div., Canco gave Alexander and his colleagues the job of curing Bradley.

The five-man team made sweeping changes in engineering, production, sales, and accounting. Four floors of tube extruding and printing machinery were compressed into one; more than $700,000 worth of machinery was scrapped. A new, straight-line production layout allowed cuts in the work force from more than 1,000 to 550—with a 40% increase in output. Tube sizes were standardized, prices raised, and customers put on a strict minimum-order and priority basis to permit profitable long runs. Michel, appointed Bradley plant manager, built a new management group.

The Sun brass took over in autumn of 1958; by January, 1959, operations were in the black. This showed what dynamic small businessmen could do within a large conservative corporation.

II. Management by Committee

In many U.S. companies, today's successful younger management men are yesterday's management trainees. Not so the vigorous quintet at Canco's Bradley-Sun Div.: They cut their executive teeth in a small outfit without a formal training program. Instead of attending courses on the art of management, they managed Sun Tube. Under Bristol-Myers, Sun was left pretty much to itself; so they had plenty of chance to practice.

Something about the Sun setup helped the five young men develop managerial skill fast. The five themselves give credit to their frequent shirtsleeves huddles as a management committee, where, to this day, they exchange problems—and solutions. "The meetings helped us to learn from each other," says Marchak. "We've had them ever since Bristol-Myers." Each man, whatever his title, is conversant with all aspects of Sun's operations.

• **Canco's Inheritance**—At first, of course, the committee worried only

with the

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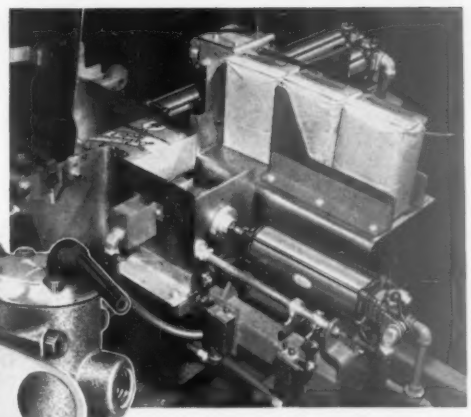

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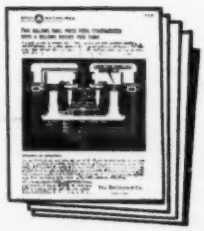

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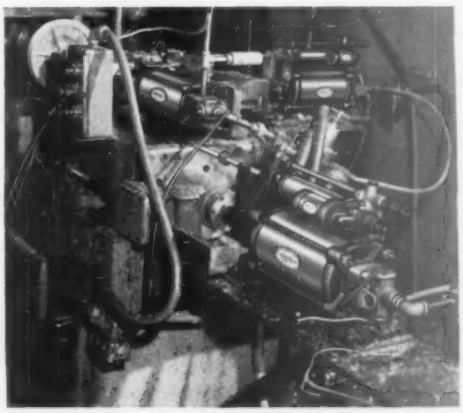

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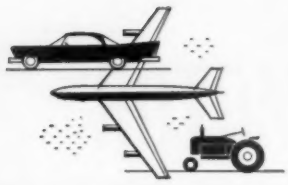

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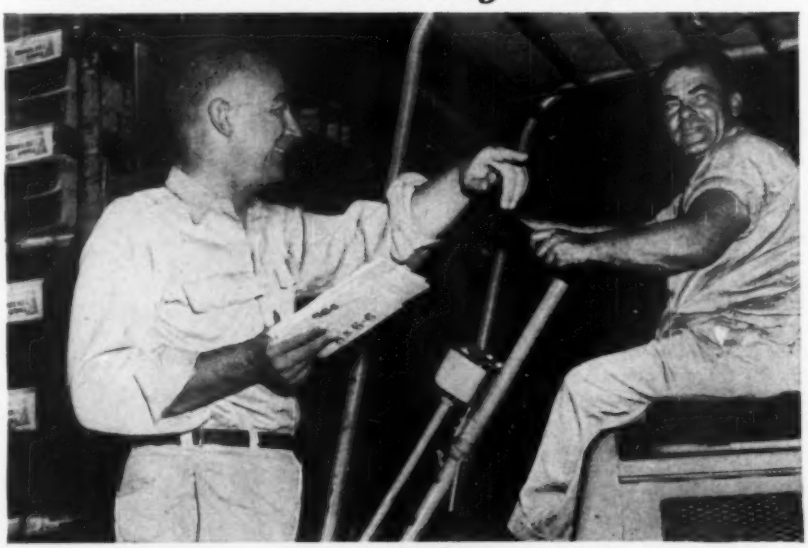

How is the building supply business changing? What effect will these changes have on selling policies of manufacturers? Gray Berry, a C&W senior copywriter, has learned some of the answers. By working on the spot, the men from Cunningham & Walsh are gathering a vast store of up-to-the-minute facts on American marketing tactics. Your product is the beneficiary of this advertising knowledge when you are served by Cunningham & Walsh Inc. Offices located in: New York, Chicago, Detroit, Los Angeles, San Francisco.

about Sun. But when Canco created the Bradley-Sun Div., it was easy to transform it intact into a divisional committee. The group usually meets once a month as an over-all committee with Alexander as chairman and every other week as a finance committee under Prior. In either case, long and hard argument goes into the making of a decision.

The committee system has spread downward from the top. Marchak runs the two Sun plants with the help of plant management committees that meet weekly to discuss problems cutting across department lines. These sessions with department heads and supervisors have proved so effective as a means of communication that Marchak has also set up regular meetings with foremen.

• **Ready for Innovation**—Another interdepartmental committee at Bradley-Sun deals with product development. This dates from the time when Marchak was Sun's chief engineer and wanted to do a better job of grooming the whole company to handle a new product. "We eliminate a lot of problems by bringing in all departments at an early level in planning," he says. The committee builds enthusiasm for an innovation and prepares supervisors for changes in production.

When Michel went to the Bradley plant as vice-president and plant manager, his first step was to establish a plant operating committee. Eventually, he hoped, the committee would take over much of his decision-making. At the outset, it did little managing, but gradually the members began to help each other instead of fighting for personal interests. Michel told them they were going to be "team members whether they liked it or not," and he got rid of some people who couldn't play the game. He knew the approach was successful when "they stopped fighting each other and ganged up on me."

• **Switching Hats**—Swapping information in committee meetings isn't the only way the five men have learned about the company as a whole. Each has a specialty, but the three youngest have, at one time or another, held jobs in almost every department.

Alexander, for instance, was in personnel, production, and sales at Sun before becoming Bradley-Sun's vice-president and general manager. Michel moved through production, sales, and new product development on the way to his vice-presidency. McCarthy, hired in 1955 and the most recent arrival of the group, has been in both production and sales. Prior has always concentrated on the financial side, but he gave a course in company accounting practices to his management colleagues, and committee experience has educated him about other departments. Commit-

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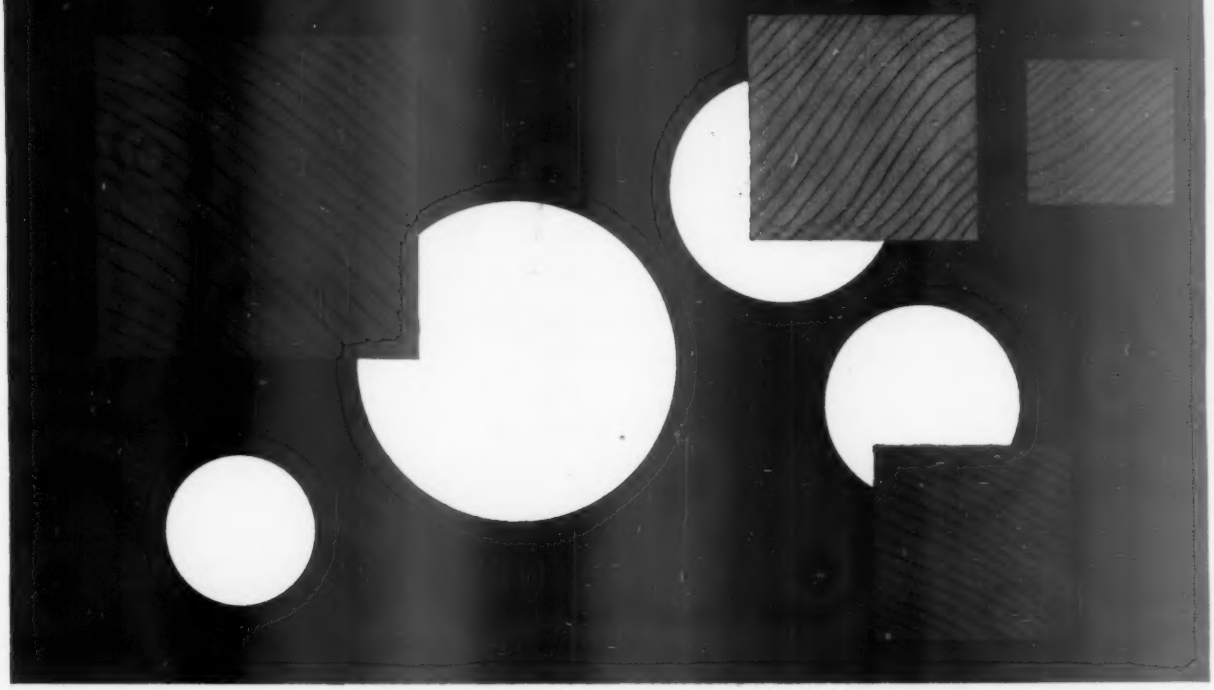

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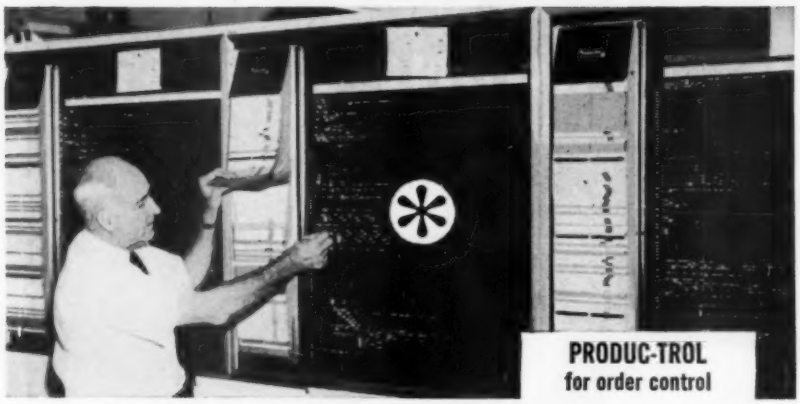

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tee work has done the same for engineer Marchak.

"You have to wear a lot of hats because we are small," says McCarthy. But Michel thinks it can be helpful to rotate jobs regardless of the company's size. "You can't learn sales unless you are selling," he declares. In line with this philosophy, Alexander worked a full shift as a mechanic after his first eight hours as personnel manager. McCarthy puts all new salesmen to work in the plant until they learn to set up an extrusion press, on the theory that "you can't sell the stuff unless you can make it yourself."

• **Personality Probe**—The management group enhanced its mutual understanding by taking a course in how to administer personality tests, given by Arthur S. Daniels Associates, personnel consultants in Cambridge, Mass. Alexander, already familiar with the course from his work in personnel, suggested it for the brass because it supplies background in psychology that, he says, "gives you insight into each other's personality, a better appreciation for each other's drives, motives, and abilities." Michel gave the same course to supervisors and department heads at the Bradley plant, where he managed to cram it into a week by putting the men into a conference room with the telephone disconnected.

On the job, the management quintet is almost continuously close, and until Michel moved to Massachusetts, all lived within 20 miles of Sun's Hillside offices. But they don't spend much time together socially—partly because there's very little leisure for outside activity anyway, partly because of the appeal of getting away with the family after intense concentration on business.

• **On the Go**—With all five of the men able and aggressive individualists, it might have been difficult to supply outlets for their drive in a small company. There might also have been trouble when Canco took over.

But Canco's Pres. Stolk not only let the Sun group continue with the autonomy enjoyed under Bristol-Myers; he also supplied the chance for expansion the men craved. The division is developing a new aluminum aerosol container, for instance. Challenges of this sort have kept the group stimulated.

Marchak sums up the management group's approach this way: "We've always learned as we went along. It was up to you to learn the things you needed to know to do your job and advance." The result is deep mutual confidence and understanding; its value is obvious to all. As McCarthy, the sales director, puts it: "The important thing for me is to have engineering and production backing. I know I've got it—I know the people. This is something you don't get with memos." **END**

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The boxboard package has a fresh new look . . . its colors are brighter and truer. The reason? Packaging chemistry has given boxboard new sales appeal . . . with the development of latex coatings.

Coatings with Dow Latex give boxboard superior printability and satiny gloss that mean new salesmanship for the boxboard package. Full-color food illustrations, ordinarily hard to reproduce, come clear and clean on boxboard coated with Dow Latex. They look good enough to eat . . . good enough to *buy!* Sales messages and brand names are sharp and clear.

Superior printability . . . improved gloss . . . both go with a coating of Dow Latex to give boxboard a new look of quality that attracts sales.

Boxboard manufacturers working with Dow Latex get heavier coating weights at higher machine speeds . . . quicker drying . . . and a far broader range of packaging applications.

Whether you package a product in boxboard or make boxboard packages, it will pay you to investigate the advantages of coating with Dow Latex.

SELL-OUT SHOW OF FRESHNESS

Saran Wrap* is the crystal clear, flexible packaging film with the look . . . the feel . . . the extra protection that sells! Food products packaged in moistureproof Saran Wrap get maximum protection and taste-tempting display. Meats retain their just-packed flavor, weight, and texture to win sales and repeat sales. Satin-soft, pliable Saran Wrap won't cloud up or become brittle . . . won't lose its protective qualities. It means fresher foods to millions of homemakers as a household wrap . . . and livelier sales to food packers . . . because nothing saves like Saran Wrap! *TRADEMARK

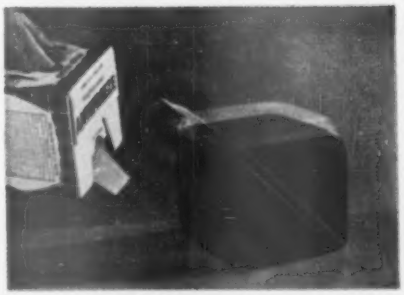
WEIGHT AND BREAKAGE REDUCED TO A MINIMUM

Styron® is effecting important savings in the packaging of a wide variety of drug and cosmetic items. Its light weight cuts shipping costs and simplifies handling . . . and its impact strength reduces breakage to a minimum. Styron (Dow polystyrene) has led the way to more practical packaging . . . and to more distinctive designs, more color, more protection in lightweight rigid containers. Applications are unlimited. Versatile Styron can be molded, vacuum formed or extruded . . . crystal clear or color styled. In its wide range of formulations, Styron is distinguished for its easy fabrication, light weight, strength, chemical resistance . . . and for its power at the point of sale!

MORE NEWS-MAKERS IN THE MARKET PLACE

Big news in picture-window packaging is Trycite®, Dow polystyrene film. Outstanding for dimensional stability, water clarity and brilliant sheen. Low-cost Trycite makes glamor packaging possible on very low budgets . . . creates impulse sales for meat, produce, baked goods, novelties and a wide variety of soft goods items.

New concept in liquids packaging uses Dow polyethylene in the sturdy Cubitainer. Lightweight, flexible, break-resistant, disposable . . . ideal for stacking. Built-in pouring spout lifts up to make the package a ready dispenser . . . a brand-new concept in the packaging of bulk liquids.



MAY WE HELP YOU?

We'll be happy to discuss your package or your packaging problem with you. The Dow storehouse of packaging experience, materials and ideas could very well hold the clue to a sales-making packaging innovation for your product.

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Molding Materials • Films • Film Resins
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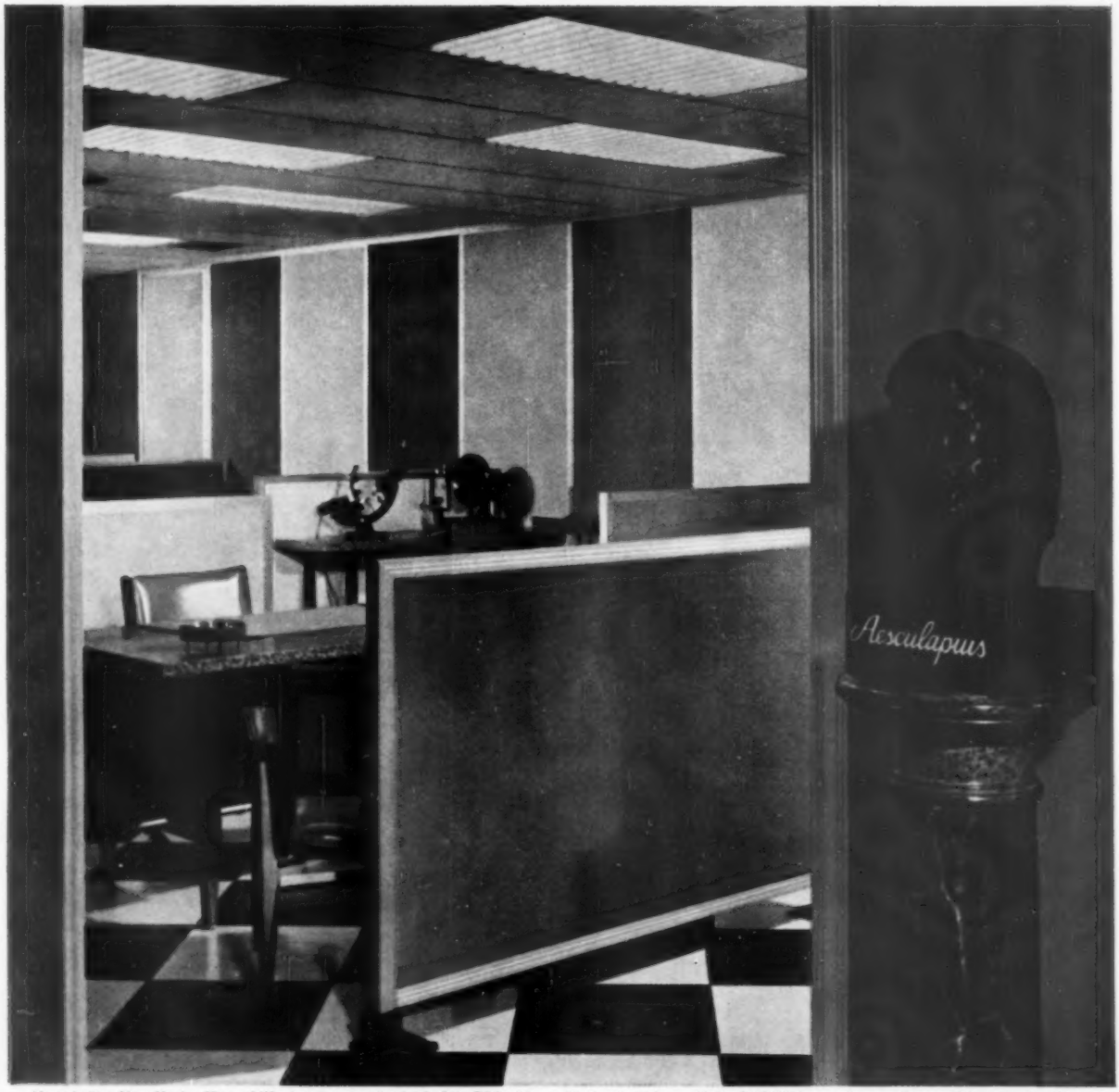

Here is the New York office of Wesley-Jessen, typical of its 300 offices. Notice how beautifully CURON is used on walls, partitions and ceiling.

Leading lens company chooses new noise-absorbing CURON wall covering to quiet, decorate 300 world-wide offices

What *is* CURON* wall covering? It's a completely new sound-conditioning material that's colorful and decorative. Its rich, deep texture makes it ideal for offices, foyers, conference rooms . . . any area, in fact, where noise is a problem.

For example, in fitting contact lenses an atmosphere of privacy and quiet is essential. CURON provides a bright yet restful setting, is the *only* acoustical material to offer wide design possibilities. No wonder design engineers Davidon Office Interiors Inc., of New York, chose CURON to sound condition, decorate the 300 world-wide offices of Wesley-Jessen.

CURON comes in many colors, shapes, and sizes. Cuts easily to fit . . . goes around curves, corners as well as over any flat surface. CURON is easy to install, to maintain . . . keeps its fresh, new look for years. Faced with a noise problem in your business? Or the need to redecorate? Why not investigate CURON now? For more information, write Curon Division, Section BW-1024, Curtiss-Wright Corporation, 50 Rockefeller Plaza, New York 20, New York.

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WALL-CEILING COVERING

**CURON is the registered trademark of the Curtiss-Wright Corporation for its multicellular materials.*

How to Gauge Company Gifts

Clevite Corp. answers a question that plagues many managements by devising a formula to figure how much it should contribute to charitable fund drives in its hometown.

In his recent book on corporation giving, Walter J. Held, former secretary of Standard Oil Co. of California's public relations committee, comments that "how to determine what is a fair sum, both from the standpoint of the company and the public, where the latter is also a source of giving, still plagues the businessman."

Where corporate philanthropy should go is, of course, a problem. But, after a few years, most companies develop a set of standards that pretty well dictate a "yes" or "no" to each request for funds. How much to give to each appeal is a harder problem, not only because there are few available yardsticks, but also because almost any final decision is bound to be an arbitrary one.

• **Few Formulas**—Most companies determine amounts more or less on tradition: They have always given $2,000 to the Universal Welfare Organization campaign, so they will again this year. As the corporation grows and profits increase—and as UWO's appeals become more pressing—the grant may be upped $500 or $1,000, and the new norm is established. Then the president's wife is made chairman of Universal Welfare's fund-raising drive, and the company doubles its gift.

Some companies have tried formulas based on the number of employees. One manufacturer, for example, multiplied its total number of employees in the area served by a drive by the average family size, then divided this number by the total population of the area. Then it multiplied this fraction by one-half the campaign's total goal to get what it considered its "fair share."

But these formulas have usually fallen into disuse, as companies realized that they wanted their share to vary with the various types of campaigns. Health fund drives, for instance, usually get a very small part of their total from business; while capital drives for such projects as hospitals, on the other hand, depend very heavily on industry.

• **Way to Figure**—Now Clevite Corp., Cleveland-based maker of bearings and bushings, has come up with a new kind of formula for determining its gift to any local Cleveland solicitation. And the formula—unusual in its very existence—is made more unusual by the fact that Clevite:

• Unashamedly admits that its gifts are based on what other companies give.

• Openly announces and displays its formula. Most companies prefer to suggest that the amount of a donation is arrived at by some sort of black magic—and thus not subject to criticism by ardent campaign fund chairmen.

Clevite has long had a philanthropic foundation so that its giving can be evened out in thin and fat years. But only lately has it come up with its new method of figuring how that foundation should pay out its money.

• **Comparing Notes**—Clevite first picked a "control group" of 20 other large companies with headquarters in Cleveland. Its list included Addressograph-Multigraph Corp., Glidden Co., Harris-Intertype Corp., Republic Steel Corp., Thompson Ramo Wooldridge, Inc., Standard Oil Co. (Ohio), and White Motor Co.

Clevite then computed the "Cleveland net profits" for each of the companies by figuring the ratio of the company's Cleveland employment to its total employment. It then applied this ratio to the company's total profits. Clevite found its own "Cleveland profit." This came to just over 3.5% of the 20 companies' total.

Since the company wanted its gifts to qualify as "above average," it said it would generally give to a campaign 4% of what it figured the other 20 companies together would give.

• **Mathematics**—From Cleveland charities, Clevite got information on how much each of the 20 companies had given in past drives, how much industry in general had given, and how much the total take was. For each kind of campaign, Clevite then decided what percentage of the total goal the "control group" would have to give for the campaign to be successful. If the company considers the drive within its area of support and the goal reasonable, it figures what the 20-company group will give and puts in 4% of that figure.

The formula is flexible. Last year, the Cleveland Salvation Army had a building fund drive with a goal of $1.8-million. From past experience, Clevite figured that 80% of this total would have to come from the larger businesses, and that 21% of this (or $307,440) would have to come from the control group. Clevite management felt the Salvation Army campaign was especially worthy and gave 5% of the $307,440—which rounded off to $15,000. END

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Now Available: Current Facts on Labor Resources

Today, it's simple to obtain all the comprehensive, up-to-date labor information you need for plant-site evaluations. The New York State Department of Commerce supplies this data—free—for a wide variety of industrial locations throughout New York State. You can learn, for example, where the right labor for your new plant is located . . . prevailing rates for specific job titles . . . age, sex, and skills of available workers . . . and the current local union-management relations.

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Based on up-to-the-minute information from field men in twelve regional offices, these reports also contain accurate estimates of the percentage of the labor force now available for employment at new plant sites, the number of people trained in particular skills, and information on community and regional training centers.

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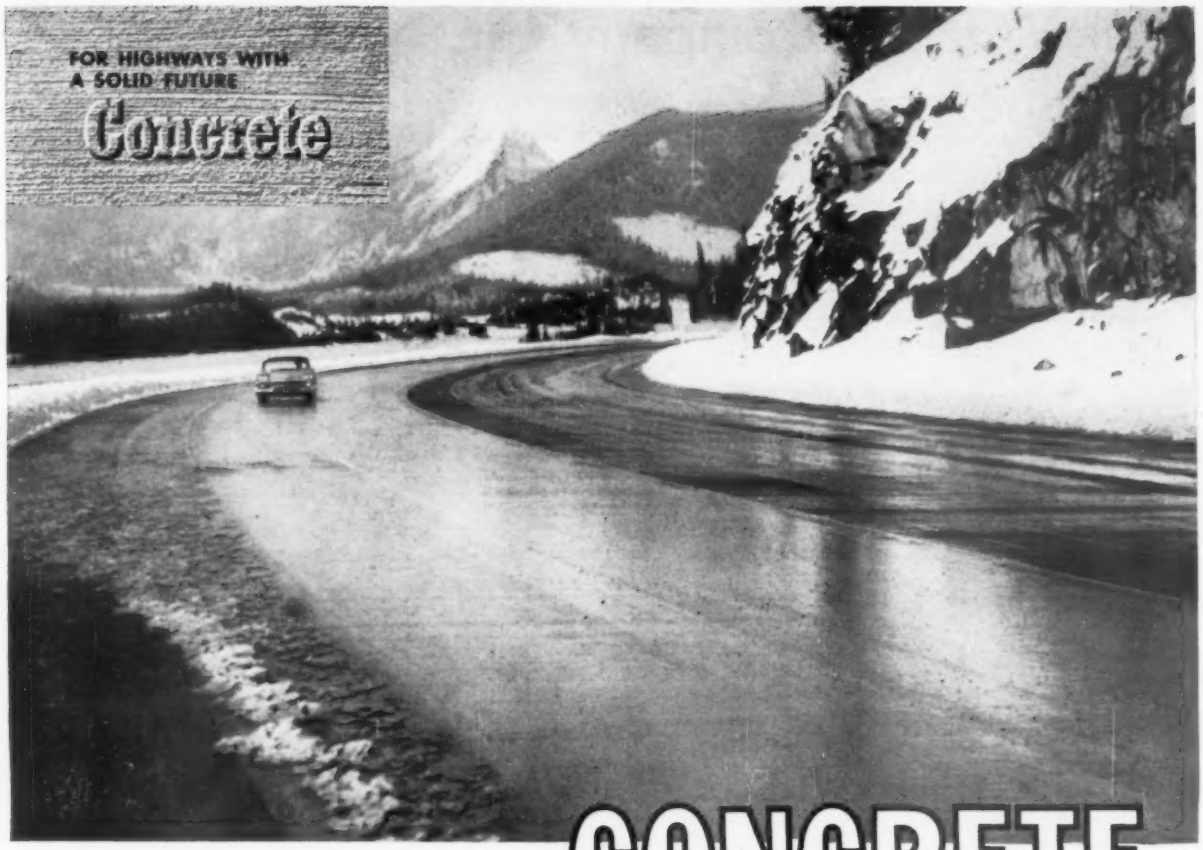
Our plant-location researchers will tell you the number of unskilled, semi-skilled and skilled workers, the number of high-school and college graduates, and the number of professionally trained people in any particular community or regional labor market. Information can also be supplied for each labor area on the number of man-days lost through strikes and the history of local management-labor relations.

The utmost discretion will be used in preparing your highly individualized labor report. All inquiries are made in strictest confidence. As a result, no undue interest or speculation is aroused in any New York State location.

To get your free reports on labor, industrial sites, transportation, water, or other subjects—please drop me a line (outlining your specific needs) at the New York State Department of Commerce, Room 552, 112 State St., Albany 7, N. Y. Or telephone ALbany 5-7521. We'll also be glad to send you our free booklet "Industrial Location Services."

Keith S. McHugh

Keith S. McHugh, *Commissioner*,
N. Y. State Dept. of Commerce



For Snoqualmie Pass, it's CONCRETE...

the only pavement with built-in protection against weather damage

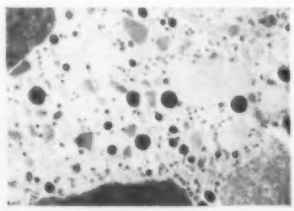
High in the Cascade Mountains of Washington, new Interstate 90 year in and year out must face the toughest punishment weather can give.

Snows are mighty heavy in Snoqualmie Pass. 30 feet a year is nothing unusual. For 5 months every year, it takes the biggest and heaviest snow removal equipment in the business to keep the road passable.

Traffic is plentiful and, when the road is posted, every car uses chains designed to take a deep bite. This is really tough on the road surface—but concrete is meeting every test.

As a special safeguard, bubbles by the billions (air entrainment) have been put into this concrete. And through temperature changes and repeated freezing and thawing, the surface is kept free of any scaling or break-up. Even tons of de-icers can't cause harm.

Here's a perfect example of the *stability* found in concrete under the most difficult and extreme conditions. One more reason why you're seeing so many new concrete highways. They are stretching out mile after mile on Interstate and other heavy-duty routes everywhere.



Checking bubbles by the billions, the "air void analyzer" gives an electronic control on air entrainment. Some 5 million bubbles per cubic inch of concrete (magnified specimen at right) give freezing moisture the room to expand.

PORTLAND CEMENT ASSOCIATION

A national organization to improve and extend the uses of concrete

In Management

• • •

David Rockefeller Sees Larger Role For Institutional Investors in Management

In the next 10 years, institutional investors will be taking an increasingly active part in corporate management according to David Rockefeller, vice-chairman of the Chase Manhattan Bank. His forecast was given last week in an address to the American Management Assn.'s conference for financial executives.

Rockfeller cited the growing tendency for personal savings to flow through institutions—insurance companies, pension funds, and mutual funds—and reasoned that **these sophisticated investors would feel obligated to make sure the companies whose stock they owned had good managements.** This is especially true, he said, if the institutions' holdings become so large that they cannot be quickly liquidated.

• • •

Out of Court Settlement With Robinson O.K.'d by Judge for Williams-McWilliams

The four-year battle over control of Williams-McWilliams Industries, Inc., came to a close last week when New York Supreme Court Judge Henry Clay Greenberg approved out-of-court settlements of a slew of law suits. Under the terms of the agreements, **Sinclair Robinson, who last year was forced to resign as president of the company and give up a big block of stock he controlled (BW—Jun.14'58,p77), must pay the company $178,192. Another defendant will pay $135,000.**

The present management, many of whom were forced out by Robinson in 1956 and returned last year, charged him with defrauding the company by having it buy the stock of Merkel, Inc., a meat packing firm, at a price "far in excess of the value of Merkel." Merkel had belonged to Lekrem Corp., a holding headed by Robinson.

• • •

Engineers, Scientists in Industry Feel Their Talents Are Misused

Scientists and engineers, who are continually wooed by company recruiters, lured into hotel rooms for interviews at conventions, and hired at fat starting salaries, often don't feel they are appreciated when they get down to work. Their major beefs were documented in a study released last week by the Opinion Research Corp.

In interviews with 622 scientists and engineers and 105 executives in six major corporations, researchers found that **72% of the technical people thought management misused their talent and 80% said they were underpaid compared to other groups.** Most of the engineers and scientists felt that management people got an unfair share of recognition in the company and community.

In other areas of conflict, 76% of the technical professionals thought management tried to manipulate people for their own purposes and about the same number accused executives of oversimplifying problems and being mostly concerned with the short-range payoff.

On the other hand, scientists and engineers tended to think of their own goals as the pursuit of knowledge for its own sake and they wanted less pressure from management, freedom to select their own work, and a flexible work schedule. **The managers interviewed showed a good understanding of what the scientists and engineers were after but called it a kind of freedom that belongs in academic institutions, not in competitive industry.**

• • •

New Product Planners Seeking A Direct Pipeline to the Top

Like most staff executives, **the men who coordinate new product planning think they should report directly to top management.**

More than three-fifths of the 252 new product planners recently surveyed by the American Management Assn. claimed their function belonged in general management. It actually was a general management job in only 41% of the companies, while in 43% it was assigned to marketing. In 11%, the new product planning coordinator reported to the director of research and development or to the director of engineering.

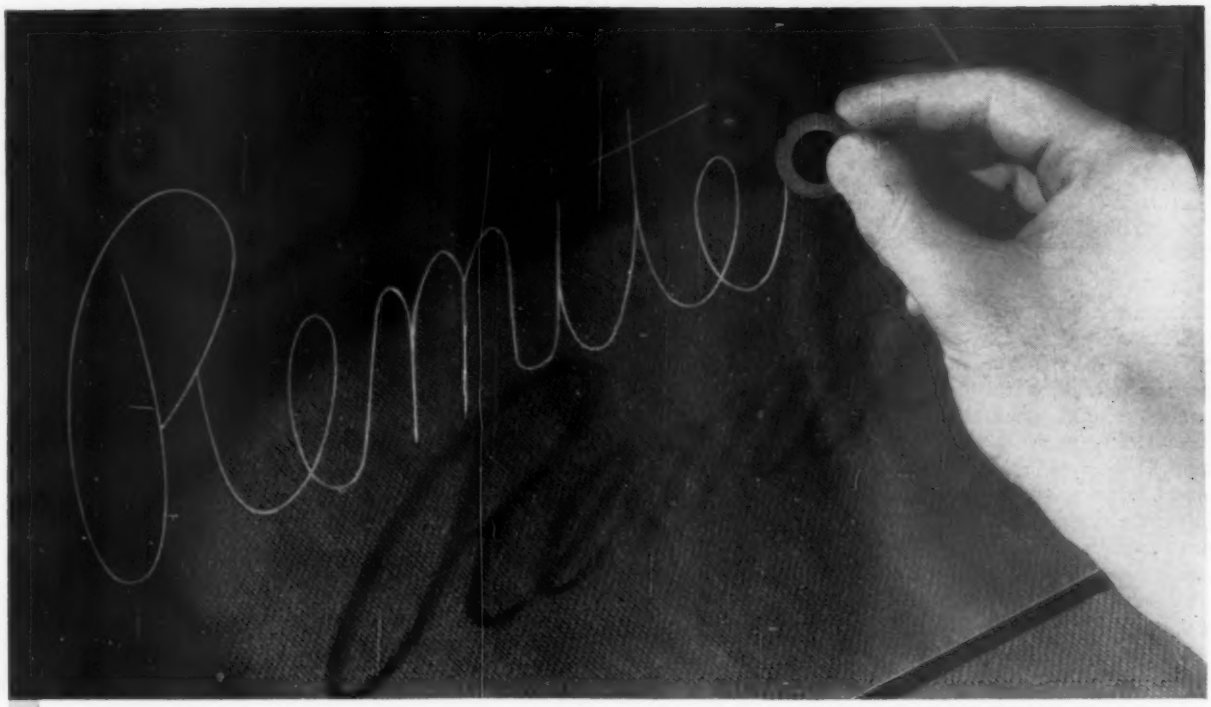
• • •

Study Finds the Best Executive Keeps Distant From Staff—But Not Too Far

The most effective executive is psychologically distant from his key subordinates and does not get emotionally involved with them, University of Illinois researchers have concluded after a six-year series of studies. However, they warn, he must not be so distant that they rebel against his authority.

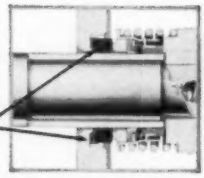
The final study of the series, conducted by the Group Effectiveness Laboratory of the University of Illinois' Psychology Dept. under an Office of Naval Research contract, **dealt with management effectiveness in 32 similar consumer cooperatives.** Earlier studies had measured the effect of interpersonal relationships in groups ranging from surveying parties and high school basketball teams to military combat crews and open hearth furnace crews. Successful executives were those who could maintain a clear distinction between themselves and their associates, and could judge their subordinates objectively. These executives were not as well liked by their subordinates as were more outgoing bosses, and sometimes their subordinates liked their jobs less. But the distant managers got better results.

The co-op study found that the success of the organizations did not seem to be affected by the extent of agreement on general policy or even objectives among the directors and the executives.

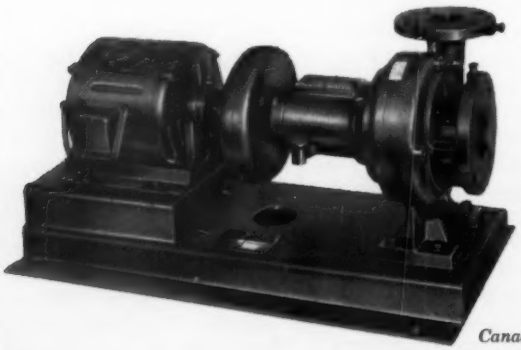


How a new seal material raised the standards of

centrifugal pump performance



Position of "Remite" seal as used in B&G Universal Pump—a unit noted for quiet operation.



A new material, called "Remite", developed in the Research Laboratory of the Bell & Gossett Company, simplifies the problem of keeping water out of the bearings of centrifugal pumps.

"Remite" is almost diamond-hard... easily cuts glass. When used as a mechanical seal in a centrifugal pump, its wear-proof characteristics eliminate pump leakage trouble. All B&G centrifugal pumps are equipped with "Remite" seals.

"Remite" is also produced commercially for a wide variety of applications where hardness and wearing qualities are important. It has high flexural strength and is resistant to chemical attack and high temperatures. Electrical insulating properties are good at both high and low frequencies.

B&G research likewise makes continuous contribution to the widely diversified line of products made by this company. These products, produced in five plants, reflect the B&G insistence upon quality.

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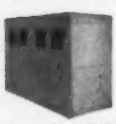
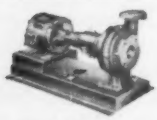
A DIVERSIFIED LINE OF HIGHEST QUALITY PRODUCTS

Booster Pumps


Package Liquid Coolers

Marlow Pumps

Heat Exchangers


Centrifugal Pumps

Oil-less Air Compressors

Visiting Economists Push the Soviet Line

Russians seem more eager to sell coexistence, press Marxist line, than study U.S. at first hand.

The first team of top Soviet economists to visit the U.S. (pictures) arrived in New York last week at the invitation of the Committee for Economic Development. They came—as CED's Chmn. Donald K. David has phrased it—to study "the way in which our capitalist economy is achieving growth and stability," and to pave the way for a return visit to the Soviet Union next year of a top group of U.S. economists selected by CED (BW—Oct.17'59,p110).

From their first encounters in New York with economists of the CED and the National Bureau of Economic Research, and with editors and economists of BUSINESS WEEK and the McGraw-Hill Publishing Co., a few conclusions emerge—conclusions that were somewhat disillusioning to some of their American hosts. It became apparent that:

• Top Russian economists—at least this group selected for export—are still glued to the traditional Marxist line on capitalism, with very few deviations. As far as they are concerned, there was no evidence of a shift some Western observers have reported (BW—Jun.13 '59,p92), no evidence that they are looking beyond Marx to Western-style economics to help them deal with problems of running a Communist economy. They have gone no further than using Western-style econometrics to deal with planning problems.

• Their thrust is political. One of their main reasons for coming appears to be to back the party line on "peaceful coexistence," disarmament, and increased trade with the Soviet bloc.

• They refute notions entertained by some Western observers of the Soviet economy that the industrial reform of 1957 (sometimes labeled "decentralization") and the recent stress on expanding consumer goods production imply some loosening of the Soviet system's rigidity and top-level control. They confirm the view that changes in the Soviet system are leading toward a more effective "command economy," not toward more decentralization of de-

HEAD of six-man team, A. A. Arzumanyan, is director of a new Soviet institute and a specialist in international relations.

M. I. RUBINSHTEIN, expert on planning, was in U.S. in 1956 as member of Soviet group observing U.S. election.

K. N. PLOTNIKOV heads older Institute of Economics, has been deputy finance minister.

D. M. KUKIN, on visiting Soviet economist team, has directed propaganda for Central Committee of Communist Party.

cision making or greater freedom of consumer choice.

• The Soviet economists don't hesitate to attack the U.S. economic system, deriding the U.S. growth rate, criticizing the way we allocate resources, distribute goods, plan capital spending. They condemn the system as allegedly needing military spending to keep it fully employed.

• **Month's Stay**—Despite the disillusioning effect of this rigid point of view, CED means to go on trying, and hopes that direct exposure to the realities of U.S. economic life and to the arguments of American economists will have some impact on the Russian's preconceived image.

During their month's visit, the Russians intend to meet not only with university and research economists but also with businessmen and government officials, in New York, Boston, Detroit, San Francisco, Knoxville, Tenn. (seat of the Tennessee Valley Authority), and Washington.

• **Team**—The six-man Soviet delegation includes some top economists and others who are little known:

• Team leader A. A. Arzumanyan is director of the Institute of World Economics and International Relations, Soviet Academy of Sciences—set up in 1956 after Deputy Premier Mikoyan's criticisms of Soviet research on capitalist economies. He is the author of many political attacks on capitalism.

• K. N. Plotnikov is the recently appointed director of the Institute of Economics, Soviet Academy of Sciences—the older institute in the academy, with greater prestige. He is a specialist on finance and economic planning, has been a deputy finance minister and Soviet representative on the U.N.

Economic Commission for Asia and the Far East.

• D. M. Kukin does not appear to be an economist at all, but has served the Central Committee of the Communist Party in various administrative and "propaganda and agitation" jobs. He has attacked proposals to reduce the volume of Marxism-Leninism and Communist Party history taught in Soviet schools.

• M. I. Rubinshtein, a professor at Arzumanyan's institute, has been in India as a visiting professor and in the U. S. with the Soviet delegation observing the 1956 elections. His specialty is economic planning and Soviet internal trade.

• Vladimir Vinogradoff, a Moscow University professor, is an authority on Soviet economic history and on underdeveloped countries. He was a last-minute replacement for a colleague reported as suffering a heart attack.

• V. M. Kollontai, the delegation's interpreter, is a candidate for a doctorate in economics, has published attacks on U. S. foreign aid.

• **Political**—The political bent of the visiting Soviet economists, and their rigid Marxist outlook, quickly became evident. In welcoming them Herbert Stein, research director of CED—a group of U. S. businessmen—said:

"Just as you were not satisfied to deduce the other side of the moon from theoretical reasoning, but decided to have a look at it, we are pleased that you have decided to come and have a look at us, and we to have a look at you."

But Soviet team leader Arzumanyan made it clear at once that the Russians' main objective is political rather than intellectual. In his first statement at CED's New York headquarters, Arzu-

VLADIMIR VINOGRADOFF, Moscow professor, is authority on underdeveloped economics.

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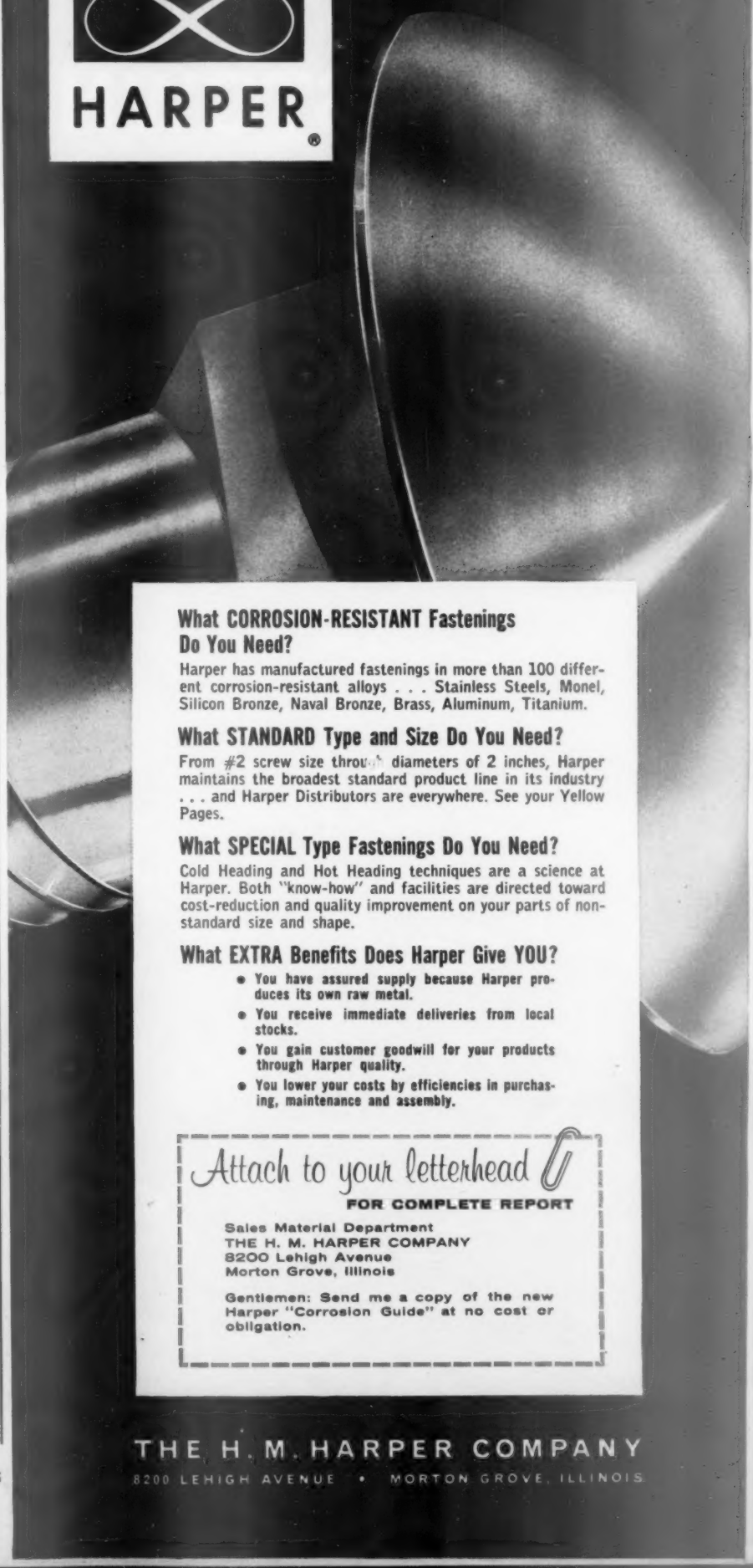

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From #2 screw size through diameters of 2 inches, Harper maintains the broadest standard product line in its industry . . . and Harper Distributors are everywhere. See your Yellow Pages.

What SPECIAL Type Fastenings Do You Need?

Cold Heading and Hot Heading techniques are a science at Harper. Both "know-how" and facilities are directed toward cost-reduction and quality improvement on your parts of non-standard size and shape.

What EXTRA Benefits Does Harper Give YOU?

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- You gain customer goodwill for your products through Harper quality.
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Gentlemen: Send me a copy of the new Harper "Corrosion Guide" at no cost or obligation.

THE H. M. HARPER COMPANY
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YOUNGSTOWN
"Look Ahead"
EXPANDS
TIN PLATE CAPACITY

manyan said Khrushchev's recent U.S. visit and Eisenhower's coming visit to the U.S.S.R. "are aimed at strengthening peaceful relations between our two countries." U.S. and Soviet economists, he went on "have a role to play in strengthening coexistence."

Looking at Arthur F. Burns—former chairman of Pres. Eisenhower's Council of Economic Advisers, now head of the National Bureau of Economic Research—Arzumanyan said: "It is difficult to think that prominent economists are totally separated from politics. It is even more difficult to think that economists are not interested in problems of peaceful coexistence." He urged cooperation in directing resources to peaceful purposes and augmenting trade.

• **Attacking**—When the discussion turned to sources of growth in the U.S. economy, the Russian visitors were not slow in turning their Marxist guns on the U.S. economic system. Giving at U.S. growth rates, Arzumanyan said, "Your own statistics have allowed us to think that the U.S. economy has had a rate of growth of 1.6%—or in any case less than 2%—in the last seven years, that is from 1953 to 1959."

Burns replied that there was bias in such a measurement—that the beginning and end of a measuring period should be in the same cyclical phase. Arzumanyan replied, "But if we take it from 1953 to 1957, we get about the same result."

Other statistical points raised by Solomon Fabricant, research director of the National Bureau, brought the same result: The Soviets clung to the statistics they thought proved their point.

• **Capital Spending**—At the lunch at McGraw-Hill, the Russians appeared no more impressed with the way U.S. industry plans capital expenditures, as discussed by McGraw-Hill economists Robert Ulin and Douglas Greenwald. Ulin stressed the "increasing tendency in U.S. industry to plan capital investment with growth of the over-all U.S. economy in perspective."

The first Russians to respond to the presentation—Rubinshtein and Kollontai—raised questions about shares of capital spending going to plant construction and to machinery, and similar technical points.

But Arzumanyan again moved to the critical attack. From 1956 through 1958, he noted, a gap developed between production capacity in manufacturing, and demand. "Now that you expect a new spurt in capital spending, he asked, "will there be another gap?"

• **Russian Planning**—Arzumanyan, in response to a question, declared that U.S. planning for capital expansion was "not planning" at all, and went on to describe the Soviet system in which, he said, "capital investment is only part of the planning process." Asked who made all the decisions on what to produce, and where and how, Arzumanyan answered: "The state decides."

V. M. Kollontai, Soviet economists' interpreter, has attacked U.S. foreign aid.

It was in this phase of the discussion that the direction of current Soviet changes came up. Plotnikov noted that over-all production and distribution decisions were made at the top—through the Gosplan or state plan—but that since the industrial reorganization of 1957, preliminary planning is done in 114 regional centers around the country.

But Plotnikov and Arzumanyan both were emphatic in pointing out that this did not imply any decentralization of control and direction of the economy. Said Arzumanyan: "Each region plans—for the purpose of perfecting the planning process."

One means of assuring continued central control is through allocation of funds by Moscow. U.S. industry ordinarily finances two-thirds of its capital spending out of profits and retained earnings. But in the Soviet Union, Plotnikov pointed out, 60% of capital spending money comes from the central government.

• **Incentives**—All this supports the conclusion of U.S. specialists on the Soviet economy that the 1957 reform did not represent any substantial delegation of autonomy to the regions or to individual factories. The same, it appears from conversations with individual members of the Soviet team, applies to the burst of Soviet interest in their price system.

They appear to be using material incentives (via prices and wages) more intelligently to insure that predetermined plans are carried out. But the market is to be used only as an implementation device, not as a substitute for planning. And the Soviet economists did not seem eager to hear how the U.S. market fulfills the task of serving national and individual objectives—a point CED wanted to stress. **END**

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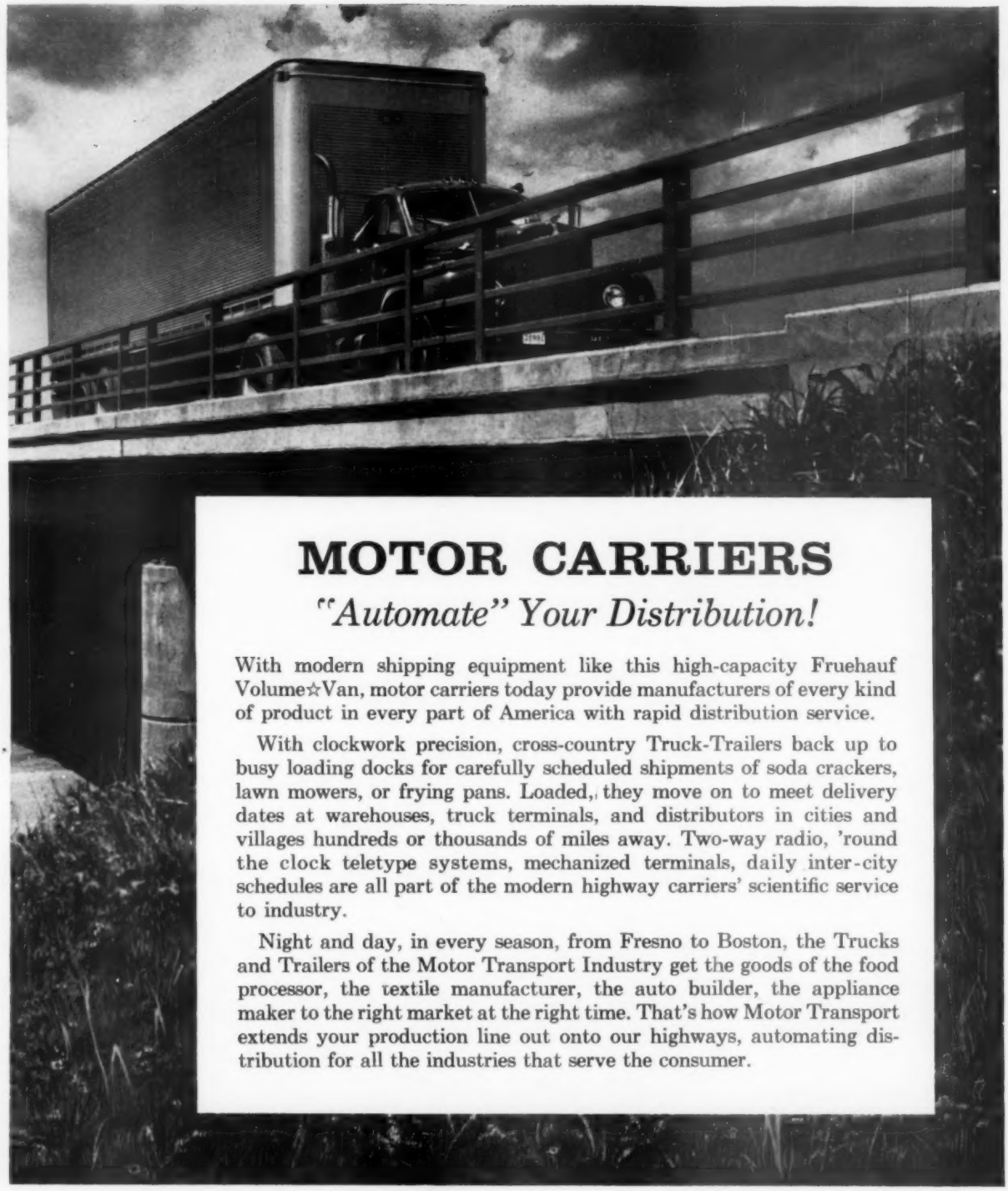

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Back to Private Enterprise

Conservatives' election victory will speed return of the last nationalized companies to private investors.

Britain's steel industry—fourth largest in the world (after the U.S., Soviet Union, and West Germany)—is in an ebullient mood. With the Conservatives returned to office by a huge majority in the elections over two weeks ago, British steelmakers expect the shadow of nationalization to disappear—once and for all.

Eight years ago, nationalization was more than a shadow. In February, 1951, the government-organized Iron & Steel Corp. of Great Britain took control of the shares of some 93 steel companies. That was the climax of the Labor Party's six years (1945-51) of postwar economic reforms.

The period of nationalization, as it turned out, was quite short. In October, 1951, British voters backed a Conservative government. The new government halted further nationalization of private steel companies. By 1953, under the Iron & Steel Act, control of the steel industry gradually shifted back to private hands. Now, the remaining companies under the government's wing, representing 12% of steel output of the once-nationalized group, will be sold soon to private investors.

• **Uninterrupted Growth**—If expansion is any yardstick, the short-lived nationalization has hardly affected the steel industry. Since the end of the war, the industry has boosted capacity from 15.7-million to 28-million tons. Meanwhile, 4.5-million tons of capacity have been scrapped. Thus, in effect, Britain's steelmakers have built a whole new industry that's larger than the 1946 one. On top of that, the companies hope to increase capacity to 32.5-million tons by 1962.

Even so, critics have charged that the British steel industry is "over-conservative" in expanding. This old charge came up again last week when Vauxhall Motors, General Motors' British subsidiary, announced cutbacks because of a sheet-steel shortage. Industry's answer: Vauxhall is more dependent than most companies on imports of U.S. steel—hit by a record-breaking strike. In any case, says the industry, the pinch will be over by mid-1960 with the addition of 448,000 tons of new sheet capacity.

I. Investor Interest

With or without shortcomings, the industry is winning the confidence of investors. Common stock of the United Steel Cos., Ltd., No. 1 company in the industry, closed last Friday at $9.10—almost three times its 1959 low of $3.49.

American investors, who already have an estimated $28-million interest in British steel, also eye the industry optimistically. Americans betting on a Conservative victory helped steel shares to edge upward before the election. And U.S. money was prominent in the wave of trading during and immediately after election week.

There are even rumors of American bids for control of one or more of the major steelmaking companies. In early 1956, Karl F. Landegger, American owner of Parsons & Whittemore and board chairman of Black-Clawson Co., bought a controlling 18% interest in Hadfields, Ltd. His move to buy into the venerable Sheffield company, considered eighth largest in the industry, blew up a storm in the City, London's financial district. Any similar moves against other British steel companies would shake the City again.

II. Controlled Operation

Though the Conservative victory is creating a stir in steel shares, it is not likely to have so big an effect on the industry's operations as had been expected.

For one thing, the industry has com-

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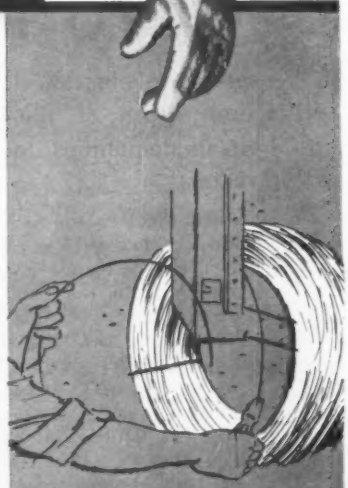

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CF&I STEEL

. . . ownership of steel shares has broadened—compared to pre-nationalization days. But changes in management have been minor . . .

(STORY on page 99)

plained that the threat of nationalization under a Labor government made it difficult to raise capital. But it doesn't look as if this difficulty has seriously slowed expansion and modernization. In fact, early this year, the industry was arguing that its expansion, tied to the government's program of economic expansion, was outstripping demands and would have to be modified.

Besides that, the election results hardly will alter the industry's structure—a unique combination of private enterprise and government control. For instance, the Iron & Steel Board, a government agency, still has the final say on steel prices. In planning development programs, the Iron & Steel Board works closely with the British Iron & Steel Federation—the industry's cartel-like trade association.

• **Protected Life**—This pattern of operation began during the depression years and has not changed much since then (despite political changes in the government). In 1932 the government gave the industry protection by throwing up a stiff tariff wall. In return, it demanded that the industry reorganize itself.

Thus, during the 1930s, the industry—until then highly competitive—gradually began to get "monopolistic." To a large extent, it was a matter of coordinating the work of individual companies through the highly centralized British Iron & Steel Federation—formed in 1934 with government encouragement.

As watchdog for the "public's interests," the government empowered a special committee to approve development programs and set maximum prices. After the war, the new Labor government continued this pattern of mixed private-public controls by creating the Iron & Steel Board. This was an interim arrangement, pending full-scale nationalization.

• **Nationalization**—In 1949, Labor passed the bill nationalizing steel. Two years later, the Iron & Steel Act took effect. About one-third of the 300 companies suddenly came under government control. But, their managements continued to operate the companies almost as if they were in private hands.

Back in power in 1951, the Conservatives set up the Iron & Steel Holding & Realisation Agency to handle the shares of nationalized companies and resell them to the public. So far, it has sold off 89% of the common stock and about 78% of the combined common and preferred shares. In the process, ownership of steel shares has broadened—compared with pre-nationalization days. But changes in management have been minor.

Next step, in the wake of the Conservatives' recent election victory, is denationalization of remaining companies, including one of the largest—Richard Thomas & Baldwins, Ltd.

• **Big Six**—Today, the so-called Big Six remain dominant in the industry. Together, these companies last year produced about 14.6-million of the industry's total 22.4-million-ton output.

Biggest in the industry is United Steel Cos., Ltd., with annual output of 3-million tons of crude steel and $342-million in sales. Through interlocking directorships, it has close ties with two other large producers—Stewarts & Lloyds, Ltd., and John Summers & Sons, Ltd. Second in size is the Steel Co. of Wales. It produces 2.4-million tons annually, does a $317-million business. Other leaders: Colvilles, Ltd., and the still-nationalized Richard Thomas & Baldwins, Ltd.

III. New Ruling Board

The "steelmasters"—as industry executives are called—tend to be a conservative lot. Dean of the group is arch-Conservative, 79-year-old Sir Walter Benton Johns of United Steel. Traditional family control is still a force in the industry. Graham Stewart, for example, is chairman of Stewarts & Lloyds; Richard Felix Summers is John Summers' chairman.

Actually, the Iron & Steel Act of 1953 did not simply order denationalization. It also gave "statutory form to methods of cooperation between the industry and the government which have been progressively evolved over the last 20 years."

The act created a new Iron & Steel Board (replacing the one started by the postwar Labor government). It can veto any company's scheme that, in its view, will throw the industry out of balance. And if the industry won't undertake a development that the board considers necessary, it can put on pressure through the Ministry of Power (to which the board reports).

In practice, the board not only can set maximum prices—but it really does. And "maximum" has little meaning. Though companies are free to sell below the level set by the board, the cases where they do are negligible.

• **Expansion Goals**—The duty to review development plans has meant that over-all programs have been drawn up by negotiations among individual companies, the industry federation, and the board. Companies, of course, have their own say-so in most cases. But their independence is restricted.

Here's how the process of setting up a program works: With the aid of government economists, the board projects the expected growth of the economy over a target period (current program covers 1958-62) and also the expected need for steel. It distributes these projections to the industry, then asks for company plans within the target limits. The companies, working through their federation, present their plans. After evaluating the plans, the board calls for any revisions that seem necessary.

Right now, the target for 1962 is 32.5-million tons. Estimated cost of the program will run to $1.7-billion. That's in addition to the $2-billion already spent by the industry since the war. Last year, the industry's capital spending reached a record $290-million. By the end of this year, the industry probably will have spent about as much again.

• **Coexistence**—To all appearances, most industry executives are satisfied with their "half-slave, half-free" existence. And the industry-government relationship isn't likely to change. The "visible prevention of abuse"—as one executive describes it—saves a lot of headaches.

In fact, though, the Iron & Steel Board is not an agency wholly outside and above the industry. Included among its part-time and full-time members are representatives of the producers, as well as of the consuming industries, trade unions, and government.

IV. Market Problems

Despite its achievements—for instance, near-record output of 477,568 tons weekly last month—the industry comes under attack from time to time.

Critics say that the industry is too afraid of excess capacity. By always wanting to work close to full capacity, they say, the industry helps to undermine any British economic boom by forcing up the steel import bill. Industry now is operating at 90% of capacity.

A debating point at the moment is the sheet-steel shortage. The industry has replied to its critics with three explanations. The auto industry, chief victim of the shortage, has exceeded its own forecast of production, steelmen say, at a time when steel companies have been having production troubles with new sheet-steel capacity. Then, the U. S. steel strike has curtailed import sources. As a final point, the industry says that hard-hit Vauxhall last year

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NIAGARA MOHAWK

. . . over half of British steel exports go to the Commonwealth . . .

(STORY on page 99)

turned down offers from British suppliers and thus has mostly itself to blame for last week's assembly-line cutbacks.

Another charge against the industry is that its "cozy" organization shields it from real competitiveness. The industry, of course, denies this charge. There's no competition in prices, the industry agrees, but there's plenty of it in quality, services, and other aspects of doing business.

• **Export Trade**—The British steel industry is much less export-oriented than its tough Continental competitors. During the industry's heyday in the 1920s, it exported about 25% of production; today the figure is around 15%.

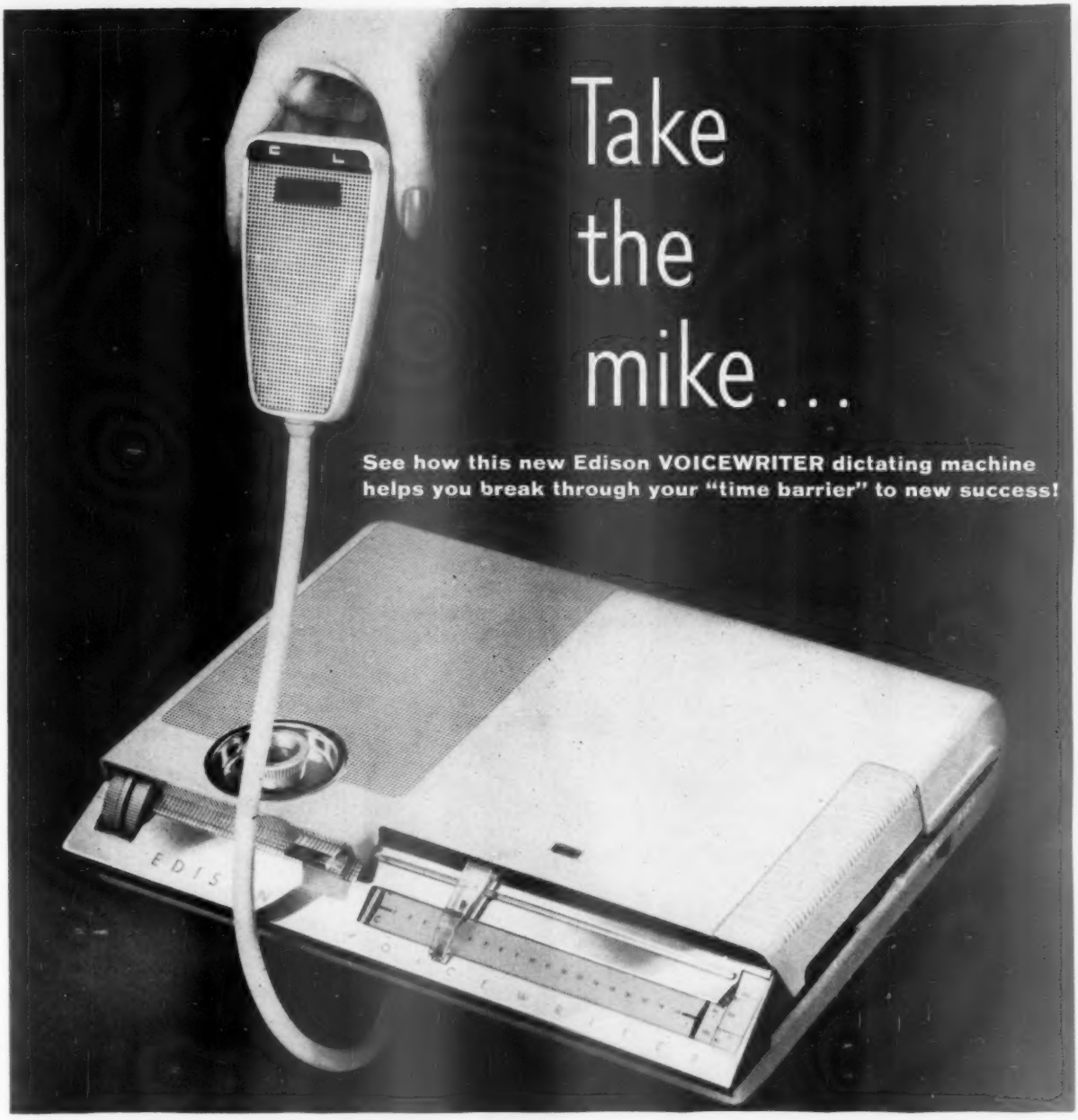
Though the industry as a whole likes this situation—which makes it less vulnerable to external pressures—it hopes to boost this percentage slightly. By 1962, according to present targets, the industry will be shipping out 5.6-million tons against today's 3.4-million.

To reach this figure, the industry will have to buckle down to a hard sell in overseas markets that it neglected during the early 1950s—when the government controlled exports. With steel in short supply, the government at that time permitted exports only to Commonwealth countries or as bargaining counters for buying raw materials.

Because of agreed pricing policy—and the industry's relative lack of dependence on exports—British steel prices tend to stay fairly stable. In late 1958, they were well above prices of continental producers. Today they are about on a par.

• **Sales Picture**—Right now, slightly over half of British steel exports go to the Commonwealth. Scandinavian countries get the next largest chunk—16%. Some 7% to 8% goes to the rest of Western Europe. South America is a growing market for British steel. Last year Communist countries took 3% of exports—about the same as the U.S.

Taking advantage of the U.S. steel strike, the British have about doubled their U.S. sales this year. Even so, Britain has not cashed in on the strike as Belgian, French, and West German producers have. By not cutting prices late last year, British steelmakers missed out on most of the first round of pre-strike buying. But they are catching up now, as the general price level of European steel has risen. In June, exports to the U.S. were 13,888 tons; in July, 25,984 tons. **END**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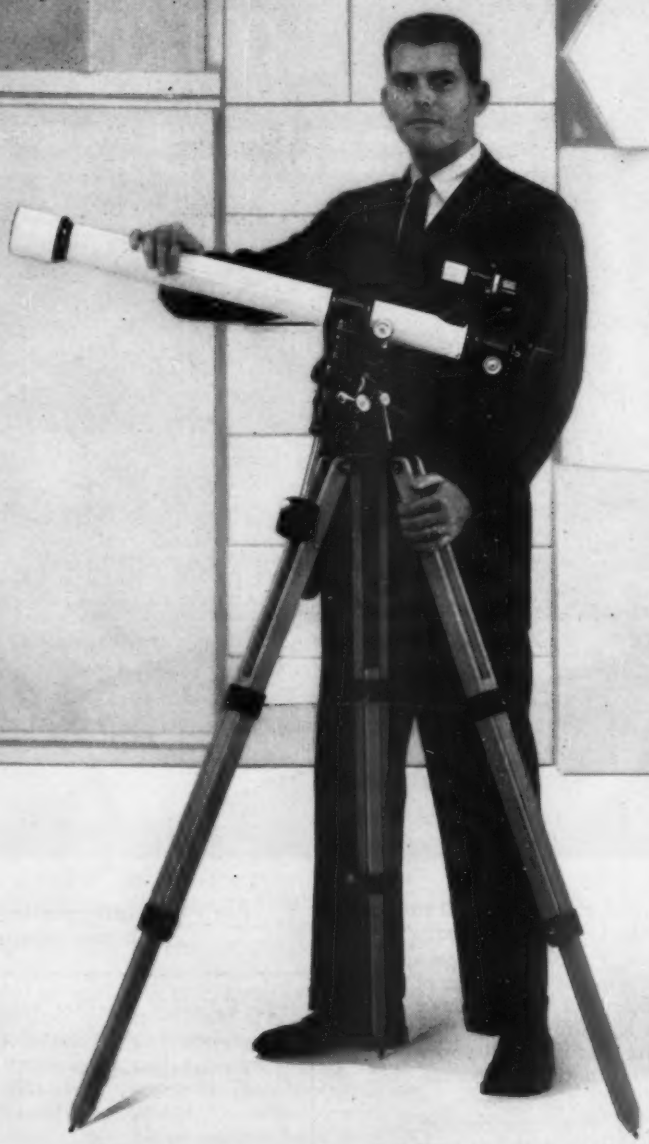

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In Business Abroad

• • •

American Assembly Conferees Worry About Deterrents to Latin Trade

There's a "rising tide of protectionist sentiment in this country," directed against Latin American commodities, such as cotton, lead, and zinc.

Concern over this trend was expressed this week by 66 business, labor, academic, and government leaders, who met at the sixteenth American Assembly, an organization founded by Pres. Eisenhower when he headed Columbia University.

Among those present to discuss U.S. and Latin American affairs were Dr. Milton Eisenhower, president of Johns Hopkins University and adviser to the President on Latin American problems; Jose Figueres, former president of Costa Rica, and Roy R. Rubottom, Jr., Assistant Secretary of State for Inter-American Affairs.

The participants agreed that protectionism works to the detriment of both U.S. and Latin American economies. **Failure of Latin American nations to obtain dollars by sales here not only slows their economic growth but also prevents them from buying U.S. products, delegates said.**

In a consensus report, the Assembly emphasized that the U.S. "should provide reliable access to its markets for goods sold by Latin America." During round-table discussion, several participants noted that current U.S. import quotas on lead and zinc have a harmful impact on the economies of Latin American producers.

Moreover, the report said, U.S. domestic policies involving subsidized production should be reviewed continuously in light of their **"disrupting effects on Latin American agricultural and mining programs".** One participant criticized the sale of subsidized cotton on world markets as "dumping, pure and simple" and a menace to economic stability in some Latin American nations.

• • •

West German Employers Vie for Workers As Unemployment Hits Postwar Low

In prosperous West Germany, near-full employment is forcing employers to scramble to get workers.

Unemployment has reached a postwar low of 0.9%—despite the influx of 112,000 refugees from behind the Iron Curtain so far this year. In this situation, some companies are buying other companies to get hold of a few hundred workers. In one case where a plant was damaged by fire, neighboring companies were on the spot a few hours later to lure workers into changing their jobs.

The government is helping to ease the situation by importing Italians at a rate of 600 to 700 a week. Almost 20,000 have been brought in since Jan. 1. About one-fifth of these have found permanent, non-seasonal jobs.

Many companies, naturally, have turned to overtime—but not without inducements. German workers are not willing to work so relentlessly as they once were.

One South German company arranges a lottery every Saturday for all workers who show up. Among the 20 prizes are refrigerators and washing machines. Saturday work is also sweetened by free beer and sandwiches.

• • •

New Head of Britain's Board of Trade Takes on Tough Negotiating Problem

In the post-election shuffle of the Macmillan Cabinet, a key post—President of the Board of Trade—goes to 42-year-old Reginald Maulding (picture), a "liberal" Conservative. Maulding replaces Sir David Eccles, who becomes Minister of Education.

Maulding takes along a piece of unfinished business—the problem of Britain's trade relations with the Continent, especially the six-nation, Common Market. Dealing with this problem was his special task in his previous post as Paymaster General. But as head of the Board of Trade, Maulding will be negotiating with greater personal authority. What's more, he now has added bargaining leverage—the plan, which he helped draw up, for a seven-nation Free Trade Area (BW—Jul.25'58,p43).

It is also up to Maulding to handle the removal of the special restrictions that Britain still maintains against American and Canadian goods.

• • •

Commerce Dept. Aide Hopes to Pep Up U.S. Exports to Far East, Middle East

A government "travelling salesman" leaves this week for the Far East and Middle East to see what can be done to pep up exports from this country.

Henry Kearns, Assistant Secretary of Commerce for International Affairs, will look into the opportunities for increased sales overseas and find out where and why U.S. goods are running into troublesome competition. Kearns has just completed a similar mission in Europe.

There's a growing conviction in Washington that Kearns also has a job to do at home. The Administration will have to push U.S. industry into an export drive. Some officials say manufacturers here don't yet recognize the full potential of markets overseas. Further, they say, U.S. companies' marketing and distribution practices are obsolete in some countries. They also point to a need for easier credit, especially in Latin America and Asia.

Overseas, **restrictions on dollar purchases are a big target for Kearns.** Washington is urging countries that no longer have dollar shortages to end these curbs. The U.S. will press for liberalization on its exports at the GATT meetings in Tokyo this month.

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RESEARCH

Virus Blamed in Heart Disease

Childhood infections linked to hardening of arteries. Other advances noted in research war on No. 1 U.S. killer.

The slow, fatal ravages of atherosclerosis (hardening of the arteries) may be due to virus infections of the blood that, as early as childhood, upset the metabolism of body fat, and lead to excess deposits of cholesterol.

The old theory that persons who had suffered heart damage from rheumatic fever should shun physical activity may be wrong; researchers have found that active persons in this category have done just as well as inactive ones.

These are just two of the research findings in heart disease that will be discussed this weekend when more than 4,000 doctors, scientists, and lay leaders gather in Philadelphia for the annual meeting of the American Heart Assn.

• **Clarification**—By and large, the researchers will be able to report real progress in some aspects of mankind's No. 1 killer. According to Dr. Irvine H. Page of the Cleveland Clinic Foundation, a good deal of confusion has been cleared up, and fresh and import results are appearing in old areas of controversy.

Work on atherosclerosis has turned a good many stones, most notably the virus theory. Some students think that a still unidentified virus may sweep periodically the whole population—in the manner of polio or flu. Adequate proof of the theory is still lacking, but there is good empirical evidence for it. Studies of the health record of groups that have been isolated for relatively long periods reveal an unusually high incidence of hardening of the arteries among people born before a given date and who were exposed in childhood to an epidemic of unidentifiable but not necessarily debilitating virus. The incidence is much lower among the younger brothers and sisters of the victims, though they had the same heredity and environment patterns.

If the theory of childhood infection is correct, some evidence of gradual fatty deposits on arterial walls should appear in young adults. Much work remains to be done on this aspect. But some support is found from autopsies of 300 soldiers killed in Korea; 80% of them had already suffered considerable damage from hardening of the arteries. Whatever had upset their metabolism had done its damage before they had reached their early 20s.

Other—and better controlled—studies are now being pressed on the possible link between virus infections and hardening of the arteries. Optimistic researchers expect tremendous increases of knowledge in the next few years on this disease which today causes nearly 40% of all deaths in the U.S.

TOO MUCH ADRENALIN is suspected as factor in hypertension by Dr. Meyer Friedman.

• **Cholesterol**—In other angles of the atherosclerosis problem, there's growing evidence that cholesterol is not the only culprit. The triglycerides (or esters of glycerine) in food (BW—Apr.4'59,p82) are coming increasingly under suspicion of causing the build-up of fatty tissue on the walls of blood vessels. The triglycerides are considered a step along the road to atherosclerosis, but not the initial causative step.

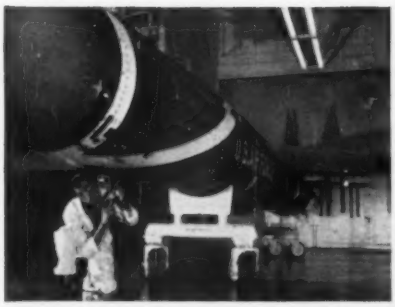
The virus theory is the hottest today in the quest for this first step. But other doctors see atherosclerosis as encouraged by heredity. Environment undoubtedly plays some part, with stress often considered a key factor.

Progress is also being made in another fatal form of heart disease, one that is still unnamed and whose effects were long lumped with other ailments under the cover-all name of heart trouble. In this disease, death is caused by an abnormal accumulation in the body of lactic acid, often called "fatigue acid." Dr. William E. Huckabee, of Boston, believes the disease may be caused by abnormalities in the circulation not previously recognized.

The fatal condition is associated with the chemical changes of fatigue, but is much more severe and lasts much longer. Huckabee says the basic cause of this ultimate form of "fatigue" has not been discovered, but he blames it on a widespread failure of the supply of oxygen to the tissues. "The key to finding a means to control this kind of heart trouble," he says, "is in getting oxygen to the tissues." Work is being actively pressed in this direction.

• **Old Ideas**—The non-activity theory after rheumatic fever is only one of the time-worn ideas on heart disease that is under fire today, but it is one of the best known.

Dr. Alvin R. Feinstein, of New York,



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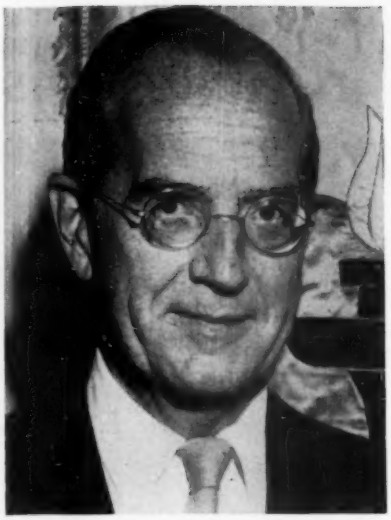


DR. IRVINE PAGE says nature of research task has finally been pinpointed.

is leading the attack, after gathering health records covering 21 years of 168 persons who, before the records began, had suffered heart damage after attacks of rheumatic fever. Some of the group limited their activities, some did not; and Feinstein says that in general there was no difference in the physical conditions of the activists and the others. What's more, the non-activists had significantly worse emotional and psychological problems.

From a medical standpoint, Feinstein concludes, activity and non-activity have nothing to do with checking or increasing the heart damage in former sufferers from rheumatic fever.

• **Surgery**—Since World War II there has been a spectacular succession of developments in heart surgery. And papers to be read at the Philadelphia meeting indicate that the pace is now accelerating.

Take the arresting of heart action during surgery. It was just two years ago when doctors first learned how to stop a patient's heart with drugs, and then hook him up to a heart-lung machine while an operation was carried out.

Now, a team from the University of Minnesota Medical School is reporting that it has eliminated the need for drugs. Instead, chilled blood is pumped through the patient's coronary arteries to the heart; when this reduces the heart temperature of 62F or lower, the heart muscle stops. Surgery can then proceed, with the heart-lung machine keeping the patient alive.

The chilled blood method has a great advantage over drugs: With it, a further flow of chilled blood can be sent into the heart from time to time during the operation, to prevent damage due to lack of oxygen. Thus operations can last much longer, and much more extensive repair work can be done.

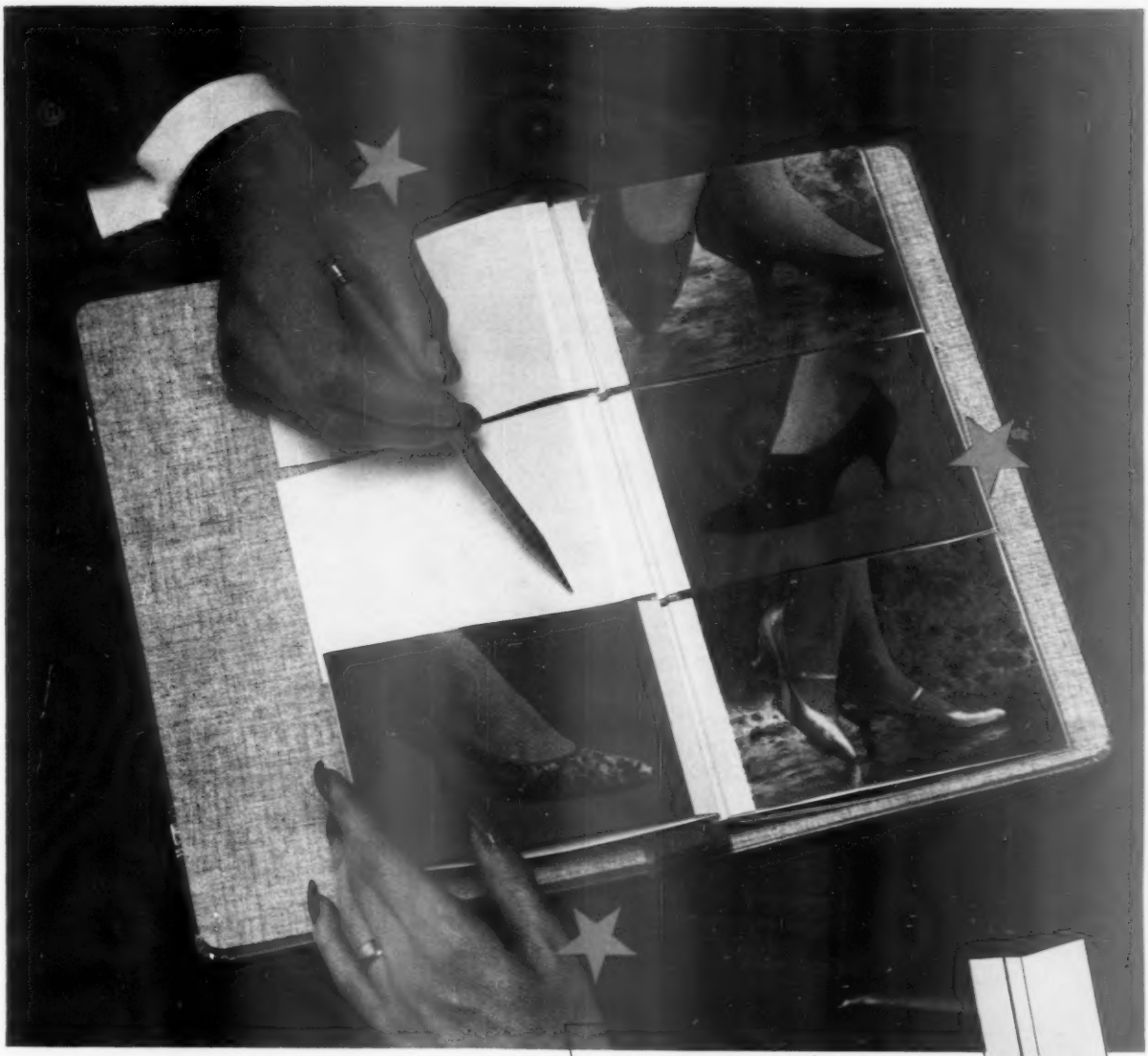
With drugs, of course, the heart stays stopped until the operation is over and the heart goes back to work. This achieves the dry condition that helps the surgeon, but can cause oxygen starvation if it lasts too long.

Bleeding inside the aorta walls—a condition that has been 75% fatal—can be checked by a surgical technique reported by Baylor University College of Medicine. Dr. Michael E. De Bakey, who last year won the Distinguished Service Award of the American Medical Assn. says the operation consists of a graft set into the aorta, the "great" artery that carries blood from the heart to the rest of the body. De Bakey says of the new technique that it has not only "significantly altered the course of the disease and removed the threat of death by rupture, but also has enabled a majority of patients to return to their previous activities."

One new idea comes from Dr. Meyer Friedman, of San Francisco, who belongs to the school believing that the go-getting type, notably executives, is most prone to heart attacks. Friedman has found out that adrenalin—or its close cousin, the noradrenalin hormone—is the villian that makes the hard-driving type particularly susceptible to heart trouble. A year ago, Friedman told of studies showing that aggressive men had "six to eight" times more heart disease than more relaxed people. This year, he goes a step further, reporting that the glands of hard-drivers seem to produce much more adrenalin and noradrenalin during the working day than do those of a comparable group of easy-going men. When the two groups were asleep, there was little difference in their rates of gland secretion.

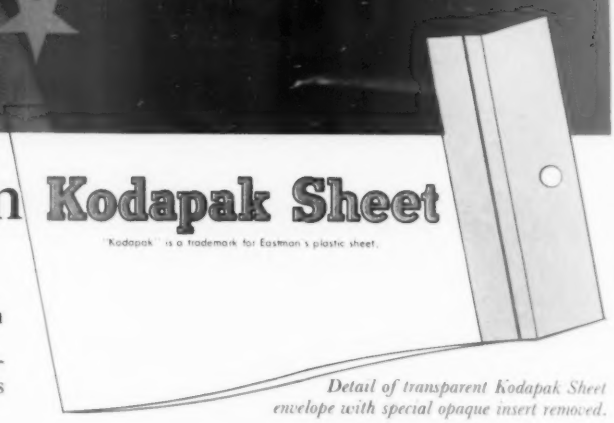
From all this, Friedman deduces that personality factors probably play a part in the excessive production of hormones by the hard drivers during their working hours. Both adrenalin and noradrenalin are powerful heart stimulants and tend to raise blood pressure. They can also raise the level of fat in the blood, and have damaged the arteries of laboratory animals to which the hormones were fed in quantity.

• **Spotting in Advance**—The complexities of the subject have left doctors a long way from being able to spot incipient heart disease, or to prevent it in advance, or innoculate against it. But researchers today are far more hopeful than they were a few years ago. Confusion of aims among the experts was widespread as late as 1956. Today, with the essential pattern emerging here and there, the researchers can work much faster and more efficiently. Diagnosis and treatment of heart disease have become a genuine science. Prevention and control may be the next step in the fight against a malady that kills 900,000 Americans every year. **END**



3-Star Triumph in Kodapak Sheet

"Kodapak" is a trademark for Eastman's plastic sheet.



Detail of transparent Kodapak Sheet envelope with special opaque insert removed.

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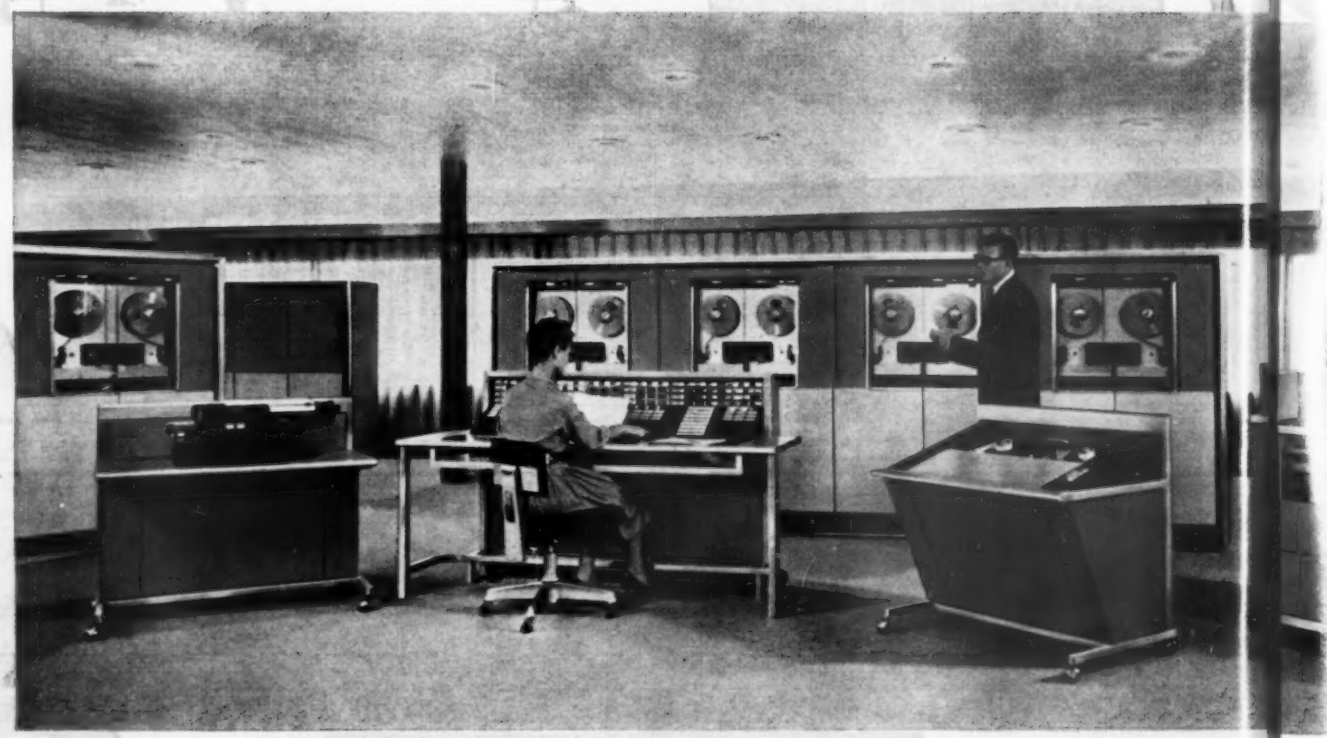
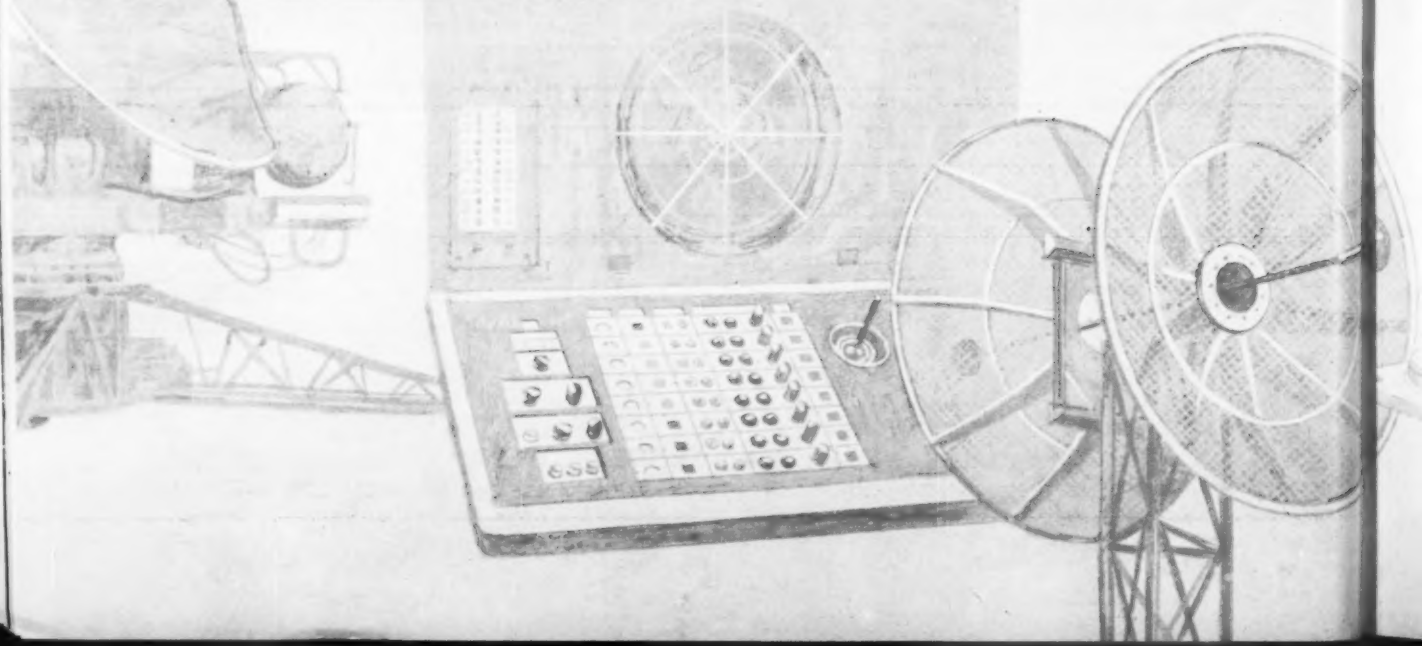
From RCA's rich background the "new generation"



To observe the RCA 501 Electronic Data Processing System in actual operation, visit the RCA Electronic Data Processing Center at Cherry Hill, near Camden.



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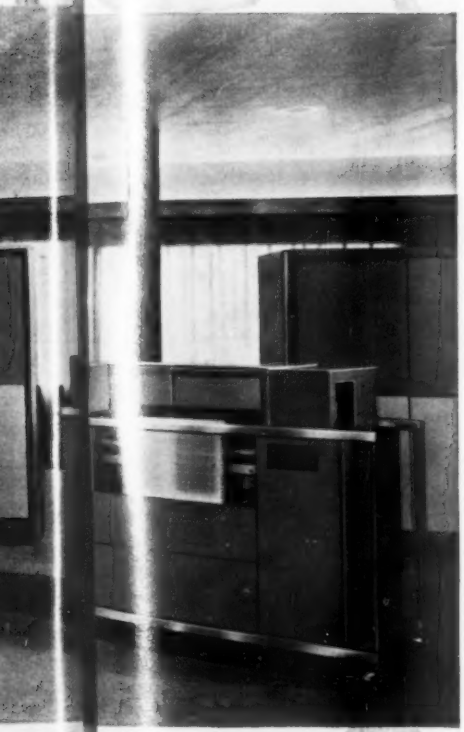

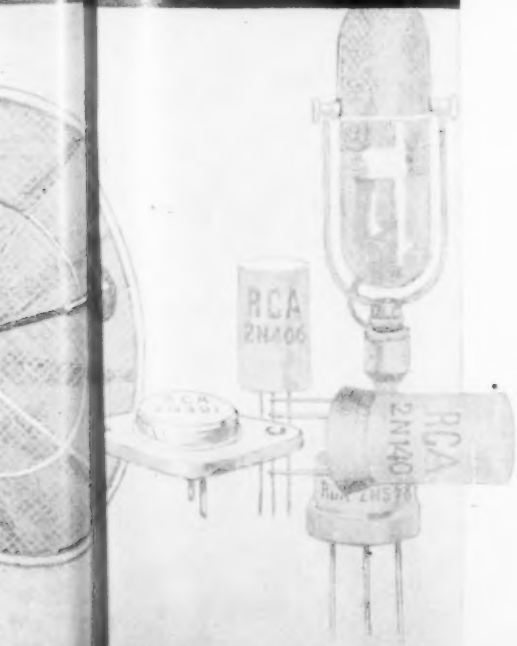

RCA 501

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For further information, write Radio Corporation of America, Electronic Data Processing Division, Camden 2, New Jersey.

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These are among some 700 chemicals now in foods on grocers' shelves that must be tested for safety by March 7, 1960

Food Additives Under the Gun

At the stroke of midnight on Mar. 7, a bit over four months from now, a new law could cause the removal of dozens of familiar processed foods from grocery shelves. That's the deadline for compliance with the Food Additives amendment that Pres. Eisenhower signed back on Sept. 6, 1958.

The threat of exile will bring to a boil the controversy over adding chemicals to food, and will refocus the spotlight on methods of protecting the American people from toxic chemicals in food. The fuss was bound to come, for in recent years hundreds of chemicals have been developed for use in processed foods—to improve color, flavor, texture, or even to add nutritive value. But it has the food industry in a real quandry as to how to protect itself against the expected blow.

• **The "Doubtful"**—The Food & Drug Administration, which has jurisdiction in the field, is convinced that most chemical additives are harmless to people, at least in the small quantities that are used. Some may even be beneficial, filling in dietary lacks.

Still, there are more than 700 chemical additives going into the foodstuffs today, and of these some 150 remain in the "doubtful" class. Nobody knows that they do harm, be it cancer or other; but nobody knows either what their long-range effect on the body may be.

The 1958 Food Additives amendment was drawn up to guard against this doubtful 150, and against new additives that are flowing from the nation's laboratories. In effect, the amendment requires that additives be tested before they can be put into food that is marketed. Before, pretesting was strictly voluntary.

Most chemical companies are all for the aims of the amendment. They have feared that among the many new additives going into use one black sheep would turn out to be a carcinogen, a cancer-causing agent. Such a discovery would bring the Food & Drug Administration into violent action; very likely it might even produce demands that Congress bar the use of any additives at all.

• **Too Little Time**—What the companies don't like is the deadline set in the law. They were given just 18 months after the signing of the law to make exhaustive tests on all additives. That gives them until Mar. 7.

That's just not enough time, the companies argue; if every available lab did nothing but make tests for the whole period, there still wouldn't be time enough to cover all the additives. Says Dr. Henry Smyth, of Mellon Institute: "We just don't have the lab resources in the U.S. today to study that many compounds in this short a time. Even if we had started up the day the amendment was passed, we would have fallen far short of the mark."

FDA has never specified what it considers the safe minimum of tests. But it is generally held that only extensive experiments on animals can provide an acceptable test of toxicity.

A test technique that has generally been acceptable to FDA goes like this: Food containing the additive is fed to animals at three levels of dosage. The minimum number of animals is around 150 rats and 21 dogs. All of them must be given the food for at least two years, unless they die first. Those that die first and those that survive the two years, are dissected in a search for disabilities. If any suspicion of cancer is found, the tests are continued for seven years with more animals.

Testing with mice and rabbits usually runs from 20 to 24 months, with an additional six to eight months to analyze the results.

• **Extensions**—In the light of this discrepancy between the 18 months grace and the time needed for the tests, FDA officials have promised extensions for companies that can show "good progress reports" in their efforts to com-

. . . the law doesn't specify that old or new additives have to be tested as cancer causes . . .

(STORY on page 113)

ply with the law. But the agency says there will be no mass extension of time after Mar. 7.

This means that the 150-odd "doubtful" foods with additives will have to be withdrawn from the market temporarily on Mar. 7—unless Congress or the FDA changes its mind.

It's a matter of guesswork just which foods will be affected, for the makers won't talk about their additives. Companies that make transparent wrapping for everything from breadstuffs and potato chips are equally closed mouthed.

What observers have figured out is that the impact will be widespread, and most severe for the newer items that have gone on the shelves in the past two or three years. Speciality products could bear the brunt; old standbys that have graduated from tins to glass containers—and so need additives to neutralize the effect on light—may go back to their old packaging techniques.

• **Public Reaction**—The food processing industry is particularly worried about public reaction to any temporary withdrawals. For one thing, the amendment is phrased so that it sounds as though many additives, known to be unsafe, are being put in foods. Responsible researchers are convinced that this is not the case, but they fear the public impression if the use of certain additives were stopped until the tests are completed. Would a built-in sales resistance persist even after the FDA had given its blessing, and would buying habits have been irrevocably changed in the interim?

• **What Is "Toxic?"**—Food processors striving to comply with the amendment have another serious trouble, arising from the difficulty of defining the word toxic.

Under the old law, chemicals were classed arbitrarily as "poisonous," or "non-poisonous." This classification was dropped because, taken at the letter, it meant that chemicals that were poisonous in extremely large doses would be barred from even trace use. The favorite example is ordinary table salt, which is poisonous in large quantities.

So, Congress changed the operative word to "toxic," but only added new complications. Almost everything can be toxic to a particular individual, at a particular moment, even in the smallest dose. There's no trouble classifying the deadly poisons—such as mercury, lead, and arsenic. The trick is to define toxicity on a long-term basis; it's almost impossible without checking the effects of a given substance over a whole lifetime, and then calculating whether the subject was worse off than a cross-section of other people with different eating habits.

• **Hard to Prove**—Thus, the word toxicity has no precise scientific meaning; yet the wording of the Food Additives amendment sets it up as a scientific measure of safety. Each company, carrying out its tests, has to arrive at its own standard of toxicity, and then suggest to FDA the dosages that it considers safe. FDA then has 90 days to decide whether to permit use of the additive within the suggested limits.

If FDA says no, the additive producer is in deep water. He can file an objection with FDA and, if that gets nowhere, demand a public hearing. But this too is little help; for how can it prove a scientific point when the loose word toxic gives it no scientific base on wihch to argue?

Says one food researcher: "Until the language of the law is changed to some more firm language—or scientists come up with a quantitative description of the word "toxic"—we're always going to be arguing from a point of weakness. All the data and the statistics in the world can't prove your point if there are no yardsticks to determine who's right and who's wrong."

The whole situation is complicated by the public fear that some chemical additives may really cause cancer. Actually, science doesn't know what does cause certain kinds of cancer. As the Mellon Institute's Smyth says, "There's no way of proving in advance that a given compound will or will not possibly produce some human cancer if 165-million people get it in their food."

• **Skittish**—The law doesn't specify that old or new additives have to be tested as cancer causes. But public fears being what they are, any company is understandably skittish about getting into a public debate over whether a given additive is in fact a carcinogen. It would much rather go quietly through the most laborious tests and hope for FDA approval without any fanfare. Some of this quiet questioning for approval has been sought and gained in recent months.

The law defines a food additive as any substance intended for use in producing, manufacturing, packing, processing, preparing, treating, packaging, transporting, or holding food. FDA hasn't said in which of these areas it would look most searchingly for carcinogens.

• **Dropping the Marginals**—The food

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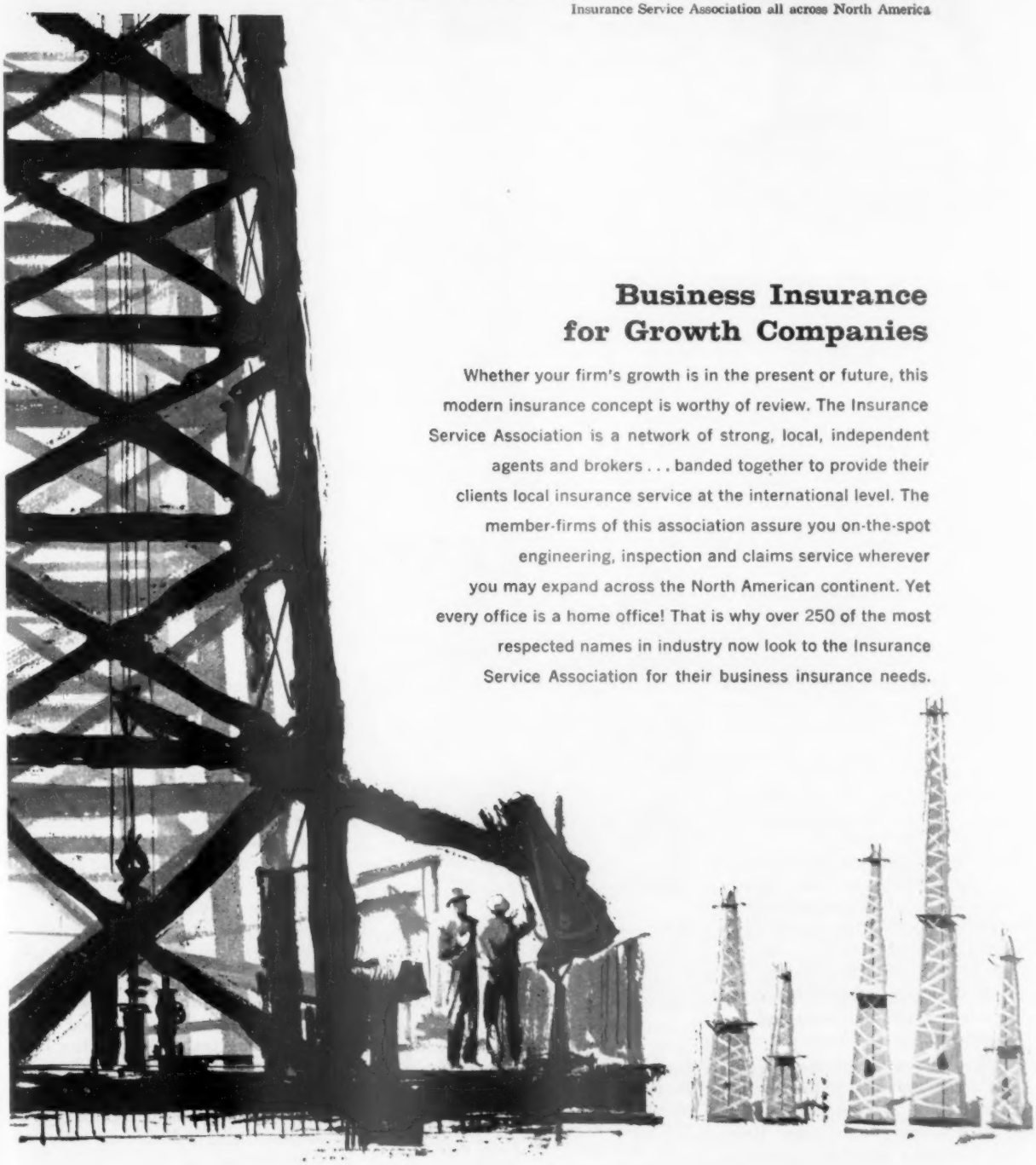

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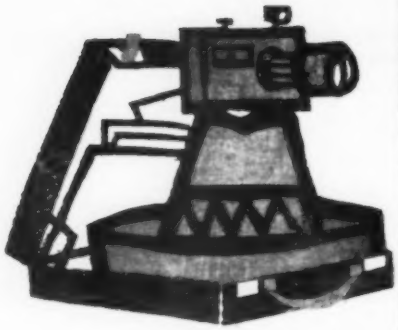


Mexican attractions draw tourists and traders

EVERYBODY'S spending money in Mexico. And lots of it.

Foreign capital has contributed to the boom of Mexican industry. Since 1950, for example, the United States has almost doubled its total capital investment in Mexico—$800 million in '58.

Mexico City, the Western Hemisphere's fourth largest city (metropolitan population nearly 5-million), is of course, the center of activity. But, have you seen for yourself the modern breweries of Monterrey . . . the cotton textile mills of Guadalajara . . . the giant smelting mills of Torreon?

Another of Mexico's leading industries is tourism, which will bring more that $600 million this year. Some half million tourists crossed Mexican borders last year, and this year some 600 thousand are on their way . . . not only to the corridas and night life of Mexico City and the lake resorts near Guadalajara . . . but to the skin diving at Acapulco, the silver marts at Taxco and the Mayan ruins in the Yucatan.

Why not see for yourself? Combine business with pleasure. Investigate the market possibilities in Mexico, and, at the same time, visit Mexico's delightful pleasure spots. And, remember—

The magazine to reach modern Mexico is

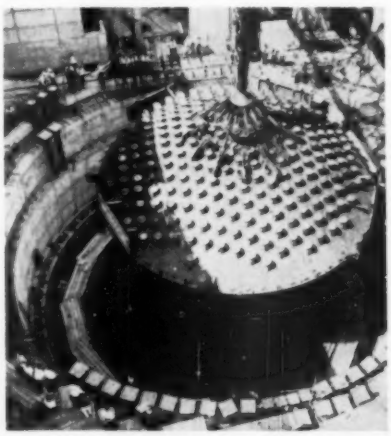
LIFE EN ESPAÑOL

. . . compounds that look to secure only a limited market are already being dropped . . .

(STORY on page 113)

industry doesn't know yet how strictly FDA will interpret the law, but chemical companies are already taking steps to tighten up, expecting the worst. For the additive producer, the essence of the problem is the economics of developing, testing, and finally marketing a new additive. So, compounds that look to secure only a limited market are already being dropped, lest the modest profits they might bring be wiped out by the cost of proving they are safe.

How long this situation will last depends more on the progress of medical research than on the decisions of Congress. For it will take a truly major discovery in the cause of disease to completely clear up the growing additive confusion.



More Power for Britain

Nuclear power station construction is progressing steadily in Great Britain this fall. Bradwell Nuclear Power Station, shown being built in Essex, England, is just one of more than a dozen similar power stations under construction. Together, by 1966, these facilities should be supplying between 5,000 and 6,000 megawatts of electricity.

In this picture, the top dome of the pressure vessel for Bradwell's No. 1 reactor is being lowered into position. Weighing 200 tons, it measures 47 ft. in diameter and is made of 4-in.-thick welded steel. The vault that it will cap has a 77-ft. diameter.

One of the first atomic power stations scheduled for completion, Bradwell should be producing its first commercial electricity next year. Its output, however, will be relatively modest—around 300 megawatts.

The new Mexican Edition of LIFE EN ESPAÑOL: A swift shirt-seller

FROM its very first issue, the new Mexican Edition of LIFE EN ESPAÑOL has shown strong reader response.

Van Heusen shirts offer a solid case in point. Van Heusen advertised their high-priced Vantage shirt in LIFE EN ESPAÑOL's new Mexican Edition with a black and white page. Two weeks later, Mexico—the whole of Mexico—had sold their entire supply of this fashionable Van Heusen shirt.

Other advertisers write of similar response from this new Mexican Edition, whose average-issue readership is well over 750,000. As a result, 75 advertisers have already booked more than 160 pages just since the May 18th issue.

And, no wonder. LIFE EN ESPAÑOL offers the best way to reach Mexico's significant market: LIFE-size pages, the finest color reproduction available and tested merchandising techniques of the U.S. LIFE—adapted to Mexican needs.

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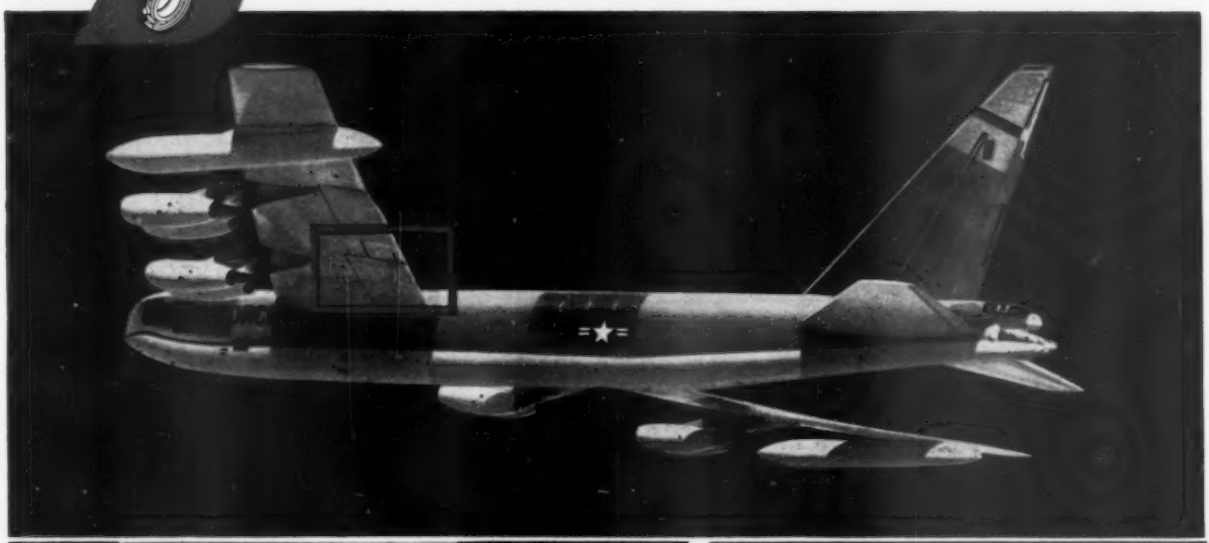
NEW DEPARTURE OF THE MONTH



N/D single row production ball bearings assure closer tolerances than the original hand selected bearings specified for B-52 actuators. Moreover, they cost less and are lubricated for extended service in severe climatic conditions.

B-52 Keeps in Trim with N/D

Picture in your mind the tremendous trim tabs of a giant B-52. How much linear play would you guess is allowed in the trim tab actuators? If you're thinking in terms of anything more than thousandths of an inch, you'll have rejects! And, this was the problem faced by a leading supplier to the aircraft industry. The thrust-supporting ball bearings being used had end play exceeding the .003" allowed.

An N/D Sales Engineer, when called in to review the problem, recommended N/D single row *production* ball bearings. He showed how these bearings are produced in volume at New Departure with standard tolerances that assure end play .001" *less* than required. What's more, these standard *New Departures cost less than the previous hand-selected bearings that were rejected* . . . all, thanks to New Departure's advanced manufacturing and inspection techniques!

If you're experiencing a bearing problem . . . or questionable production costs—call in an N/D Sales Engineer. He probably has an N/D ball bearing that can solve your problem . . . and save your company money! New Departure Division, General Motors Corporation, Bristol, Connecticut.

NEW DEPARTURE

BALL BEARINGS

proved reliability you can build around

In Research

• • •

Radio Astronomers Urged to Fight Interference With Signals From Space

Attempts to commercialize more radio-frequency bands could jeopardize the whole future of radio astronomy research. That is the charge of Dr. Leo Goldberg, chairman of the University of Michigan's Dept. of Astronomy and vice-president of the International Astronomical Union (IAU).

Speaking a few days after formal dedication of Michigan's new 85-ft. telescope, claimed to be the most precise instrument of its type in the world, Goldberg called on U.S. astronomers to band together to protect the frequency bands used in radio astronomy. **Band allocations are under discussion at the International Telecommunications Union meeting in Geneva, Switzerland.** This group, an agency of the United Nations, meets only once every 10 years.

The problem, according to Goldberg, is that radio waves that reach earth from vast distances in space are extremely weak. **They are easily "drowned out" by stronger signals of the same type originated on earth by man**—such things as high-power, long-range radar signals, high-flying aviation, missile communication and telemetering transmissions, satellite transmissions and man-made signals reflected from satellites, moon and planetary radar.

"At the pace at which communications is filling available radio astronomy bands, the entire spectrum is apt to be filled up before long," warns Goldberg.

In the international discussions at Geneva, **the Soviet Union is the country that most strongly supports protection of the bands most important to radio astronomers.** The Dutch propose to protect "a stripped-down minimum" of bands, while the U.S. delegation (on orders from Washington) is seeking to protect only one.

"If the U.S. proposal is passed", states Goldberg, "It might kill radio astronomy as a science." Aside from its scientific implications, this would be ironic, since astronomy, more than any other branch of technology, has spawned the space age.

• • •

U.S. Will Launch 10 Research "Labs" During International Rocket Week

Ten research rockets will be launched as the United States' contribution to International Rocket Week, Nov. 16-22.

The planned rocket series is a highlight of the U.S. program for International Geophysical Cooperation—1959—a continuation of the IGY program of 1957-58. **Tentatively scheduled for firing:**

• Two rockets from Wallops Island, Va. one (a Nike-Asp) will measure upper-atmosphere winds at 150 miles; a second will investigate solar X-ray emissions.

• Two Nike-Cajans, to be fired from Fort Churchill—in cooperation with the Canadian government. Both will try, primarily, to determine water vapor content of the atmosphere from 18 to 60 miles above the earth's surface. Also from Fort Churchill: an Aerobee, carrying a magnetometer, to measure the earth's magnetic force.

• Two other Aerobees, from Elgin Air Force Base in Florida, to study micrometeorites.

• A Navy Research Laboratory shot from White Sands, N. Mex., carrying equipment designed to record a portion of the solar spectrum.

• • •

Arrow Poison, Duplicated by Chemistry, Finds Greater Use in Operating Room

Discovery of the chemical constituents of calabash curare, a South American Indian arrow poison, and the laboratory synthesis of its most important alkaloids were reported last week by Prof. Paul Karrer of the University of Zurich. Speaking at the dedication ceremonies for Geigy Chemical Corp.'s new multi-million-dollar research laboratories in Ardsley, N. Y., Karrer said that manmade versions of curare are being tested as muscle relaxants in several hospitals in Switzerland. They appear to have all the same properties as the natural material. **They can be used safely to relax a patient's muscles in the operating room,** thus cutting down the use of anesthetics.

The Ardsley research facilities will be the first U.S. labs for 200-year-old J. R. Geigy of Basel, Switzerland. Researchers working in the U.S. will attempt to find chemical answers to some of the same problems that are faced in Swiss laboratories. High on the agenda: research into the causes of arthritic and metabolic diseases.

• • •

Contacts With West Expected to Speed Russians' Progress in Basic Physics

Atom-smasher research in the Soviet Union will start showing important results in "a year or so," according to Richard H. Dalitz, a University of Chicago physics professor. Dalitz, a member of the Enrico Fermi Institute for Nuclear Studies, toured basic research facilities in the Moscow area last summer.

Compared to the advances made in particle accelerator physics in the U.S. during the past few years, Russian progress has been slow, says Dalitz. **He attributes this to the isolation of Russian physicists from Western laboratories.** As a result, the Russians, in many cases, have repeated some of the same mistakes U.S. physicists made and even are making a few of their own.

But now that the communications and travel bans have been lifted and Russian physicists are beginning to mingle with their Western colleagues, says Dalitz, Soviet basic physics research activities have a new look. A few important scientific experiments already have resulted and more can be expected. Concludes Dalitz: "The Russians can be expected to gain experience very rapidly now . . . and to make important contributions to basic physics within a year or two."

New Emphasis on Oil Marketing

● Standard of Indiana's experiment with fewer but larger gas stations underlines trends overtaking the industry.

● As oversupply whets competition, more companies put stress on marketing efficiency as answer to dragging profits.

● For many production-oriented companies, this means a bigger role for its marketing executives.

Standard Oil Co. (Ind.) this month began a major experiment to find a way to boost lagging profits in gasoline and oil marketing. For it's no secret that, even though sales volume reached a record last year, profits were "shot to hell," as the spokesman for one major company put it.

Indiana's test is just one more sign of a shift in emphasis in the oil industry. In the days of wartime shortages, much of the business was heavily oriented to production and refining. In recent years, thanks mainly to a glut of product, marketing has climbed high in the saddle again. Sales volume is not enough. The stress is on marketing at a profit. Indiana's Dwight F. Benton, sales vice-president, was quoted by Petroleum Week as citing the need for the "reorientation of all segments" of the industry to marketing—and to profitable marketing.

• **Pilot Projects**—Standard's experiment started on Oct. 1 when it closed down three service stations in Fairfield, Iowa, replaced them with one larger one. Last week, it started a shiny new eight-pump station to service Vincennes, Ind. (population 19,000), after shutting down all eight stations that formerly served the whole community. Both new stations are company-operated, though some of the personnel of the old stations moved in.

Indiana officials stress that the new stations are pilot laboratories. The company will probably open a similar station in Mattoon, Ill., may extend the project to larger cities. Its end target: more profit, via increased throughput of product with a minimum investment.

• **Varied Reaction**—Industry reaction was fast and varied. It ranged from the terse comment that "Indiana is 15 years behind the times" in the consolidation of outlets to applause for a "bold new approach" to the profit problem. "Anything that seeks to improve profit is a good thing," says one company. And, "We're glad Standard of Indiana is doing it. Now we won't have to test it ourselves," says another.

Probably the truth lies somewhere between the two extremes. Most companies have been weeding out the dogs ("though we're not doing it fast enough," says one), and moving toward fewer, larger stations over the years. But many companies feel that the sweeping character of Indiana's experiment puts it in a class by itself.

• **The Advantages**—Consolidation has some obvious advantages. Theoretically, at least, the station operator stands to increase sales considerably and to up his profits. The supplier stands to gain over the long haul. Servicing one station instead of several means more economical deliveries, fewer calls by company salesmen, concentrated promotion, a smaller total investment in any facilities the company may lease to dealers. If all this results in a stronger dealership, the retailer has a better chance of competing with the independent who pins his hopes to fast turnover at low per unit profit—the true supermarket concept.

• **The Risks**—But consolidation has its risks, too. Convenience of location and —above all—loyalty to an individual dealer who has given good service over the years usually outrank brand loyalty in pulling customers to a station. It is harder for the big superstation to maintain that personal following. And customers who put convenience first may well shift to a nearer station as the smaller ones consolidate. These factors may spell loss of volume. "And," says one company spokesman, "if you cut your volume over-all by as much as 25%, you are committing suicide."

Indiana is well aware of the risks. It will evaluate its test results both on profit and on volume.

Nevertheless, companies that have consolidated aggressively over the years report no signs of self-destruction so far. Says one, "In every market where we have replaced smaller stations with fewer, bigger ones, both gallonage and profit have risen."

• **Long-Term Trend**—And the long-term trend has been mainly in the direction of consolidation. Shell Oil Co. has cut the outlets it services directly from 13,500 to 10,500 since 1949. Gulf Oil Corp. reports it has been consolidating since 1955. Sun Oil Co. has reduced the number of its outlets from around 14,000 in the 1930s to about 8,000 now. Pure Oil Co. is considering some such plan as Indiana's. Continental Oil Co. has tried it in some areas. Another major is mulling over the possibility of setting up a large mother station, offering complete service, surrounded by satellite stations to make the quick sales.

• **Move to New Locations**—On the face of it, consolidation might seem to run counter to the marked rush for new outlets of recent years. It is estimated that Standard Oil Co. (Calif.) has increased its own outlets some 10% since 1956, and its independent stations perhaps 2.5%. Conoco has made six moves—not all in retailing—to expand in the last year, the last being its purchase in May of K. P. Kendall Oil Co., large marketer, in Chattanooga, Tenn.

Actually, though, says one major marketing executive, this much-stressed expansion is often not a net expansion at all. Often it represents relocation, rather than numerical increase.

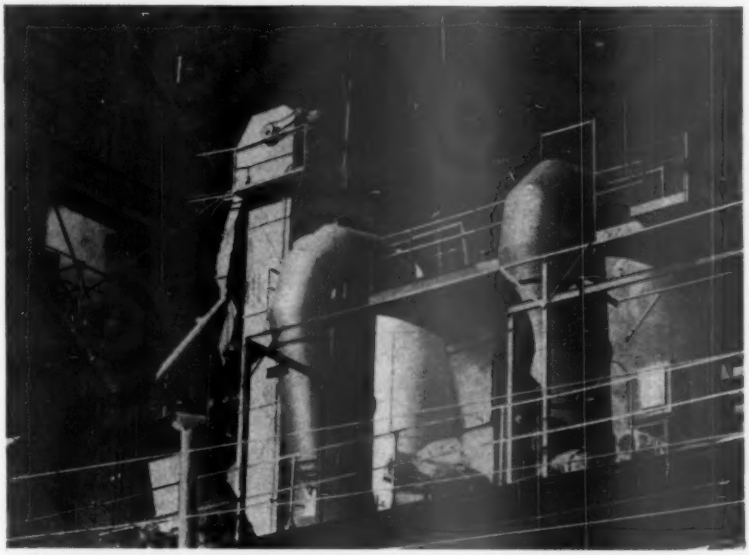
• **Difference in Service**—Fast-moving, aggressive independents pointed the way to the superstation. But there is one important difference. Many of the independents have fought the competitive battle on price and minimum service. Most of the majors' superstations—including Indiana's—stress the fullness of their service, don't sell on price. One exception: Conoco recently put up two big stations in a consolidation move which sell only oil, gasoline, and tires, batteries, and accessories; they don't provide lubrication.

Strategems vary from company to company, however. DX Sunray Oil Co. of Tulsa, for example, while "watching Indiana's experiment with a great deal of interest," has no plans to go that route yet. It is adding stations at about the rate of 100 a year. Phillips Petroleum is another company that has no plans for "super stations." Both companies are concentrating on redesign of their stations, trademarks, signs.

• **Surplus Problem**—Standing grimly behind the whole changing surface picture in the oil business is the basic problem of oversupply. Most companies feel the situation is a little better this year than last, but it is still far from cheering. The curse of the surplus that followed the industry's heavy capital expansion of the late 1940s is still costing it heavily. How to get rid of that surplus has been the chief industry concern. This has led to the battle for new markets, dumping, price wars, and,

SILICONE NEWS from Dow Corning

Found: A Paint that Lasts



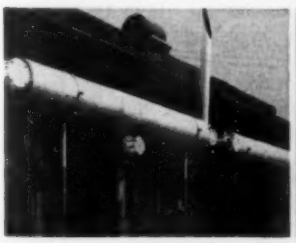
Cut Costs with New Long-Lived Silicone Finishes

You paint your plant to protect against rust and rot, but how can you protect the paint? Sun, rain, heat, sleet, smoke, and other elements of the industrial climate take a heavy toll. Shortly after the paint is completely dry, it starts to deteriorate. Soon, it must be re-applied. Thus, the cost of keeping away rust can run high; not due to the price of the coating material as much as to the repainting time involved.

Now, however, new paints based on silicone resins make it possible for you to make some really substantial cuts in paint maintenance costs. Proven to have superior durability, these silicone finishes last a good 25% to 100% longer. They keep their gloss and color and film integrity despite tough exposure to weather . . . despite high temperatures that burn or crack conventional finishes.

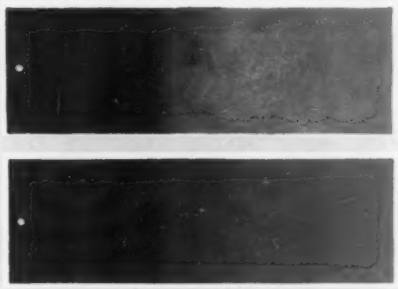
Naturally, this greater staying power means fewer repainting jobs. And that's especially important in hard-to-get-at areas of the plant, or on hot-running equipment that must be shut down for painting.

For instance, the Austin White Lime Company, of Austin, Texas, had difficulty keeping paint on the kilns and stacks shown above. Then they tried a paint based on Dow Corning Silicones, and report it ". . . by far the most satisfactory paint we have ever used." You can see the gleaming results.



Many other firms have come to the same conclusion. At left are two diesel mufflers at the Philadelphia Gas Works. Both were painted two years before these pictures were taken; one with an organic coating, the other with a silicone finish. The burned, cracked and discolored paint is the organic; the "like-new" coating is the silicone.

What if there's no heat problem, just weathering? New silicone-based coatings outlast conventional paints even where high temperatures are no problem. Look at the test panels in the photo. These panels have been exposed for one year in an industrial location where corrosive atmospheres frequently prevail. The conventional organic paint has faded, lost its gloss and chalked badly, while the silicone finish (bottom) is still in fine shape.



Colors Unlimited . . . Silicone finishes run the complete spectrum. If you want a hot-spot finish that will resist 1,000 F, certain pigments such as aluminum must be used.

But, when temperatures are not high enough to damage the pigment, you can get virtually any color you wish. This is important, for it means that, for the first time, you can carry color-coding systems over onto hot equipment without worrying about early paint failures.

Product finishes based on Dow Corning Silicones further prove the resistance to chalking, checking, fading and oxidation of these resins. For example: Sherer-Gillett, Marshall, Mich., a major producer of refrigerator display cases for supermarkets, has found a silicone-based enamel superior in durability . . . retaining high gloss after long wear . . . capable of absorbing more abuse.

Why not investigate silicone paints for your plant? Send today for the descriptive brochure, "Why Silicone-Based Paints Mean Less Maintenance." Write Dept. 2222.

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A definitive feature article on AMF, **"HOW TO STAY A GROWTH COMPANY,"** appeared in the September 12, 1959 issue of *Business Week*. Because we have received so many requests for this article, we are asking if you would be willing to part with your copy. In this way, we hope to give other businessmen and many more of our employees an opportunity to read the article. If you still have the September 12 issue, please send it to my personal attention and we will gladly cover the cost of mailing.

C. J. Johnson
Secretary

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sooner or later, to a profitless volume.

Price has become more of a factor in selling, the majors admit. Price wars have led consumers to expect a bargain—with the result that they get their gasoline at "steal" prices, one company says. The industry views with distinct alarm, supermarkets' moves to set up gasoline pumps in their parking lots, selling gasoline at little or no profit, to lure traffic. "The legitimate dealer will have to strike back," observes one company; "maybe he'll be selling coffee at cost some day."

• **Merchandising Gimmicks**—Some majors have responded with new merchandising approaches. Standard Oil of Kentucky, for one, has merchandized "Moly" grease, reports its promotion has brought a big increase, not only in grease but in sales across the board. Others have met gimmick with gimmick. Some Humble stations have offered Brownie cameras at cost, for example.

More basic shifts, though, are in the making. Thorough reorganizations—the recent overhaul of Standard Oil Co. (N. J.) is a case in point (BW—Sep.12 '59,p48)—have as one major objective increased marketing efficiency, better profits.

In some companies, at least, marketing is taking over the position of quarterback. When the market was less fiercely competitive, more stress was placed on "optimum runs" at the refinery—and optimum runs were not always geared to the needs of the market. Now, some dopesters say, marketing men are telling production people when to drill for oil and how much to refine. This is the case at Delhi-Taylor Oil Corp., an integrated company at Corpus Christi. Recently it said it will have to know where refined product will be sold before it even starts exploration.

This is not true in every case, of course. Some companies have always been geared sharply to marketing. But it is safe to say that oversupply has given the marketers a more important role.

Oversupply has put pressure not only on the majors to sharpen their competitive wits against each other. The independents thrived on the oil glut. They could buy at a price that otherwise wouldn't have been available to them and sell at a 2¢ differential—or better.

But some of the independents, too, are feeling the competition as the majors fight back. Some are offering services they used to ignore, just as, in other retailing fields, some discount houses have upgraded to give more service. Service costs the dealers money. Both independents and majors are learning to view profits through the long end of the binoculars, some say hopefully. As a result, price wars have stabilized—a little.

Do these pressures, and the pressure for more profit, mean more supplier control of retailing? Some say yes, and have acted on the theory by buying their own retail outlets. DX Sunray, for one, is out "to build more stations to control our business." Another possibility is that majors may go in for dual brands.

Dr. Lloyd R. Saltzman, professor of marketing at the University of Tulsa, said recently that the corner gasoline station may be fighting for its economic life. A survey of dealers who had gone out of business in the Tulsa area in the last couple of years suggests that three out of 10 service stations will go broke or change hands this year. The station operators make too little profit, have insufficient working capital, too little training, and get too little help from the oil companies.

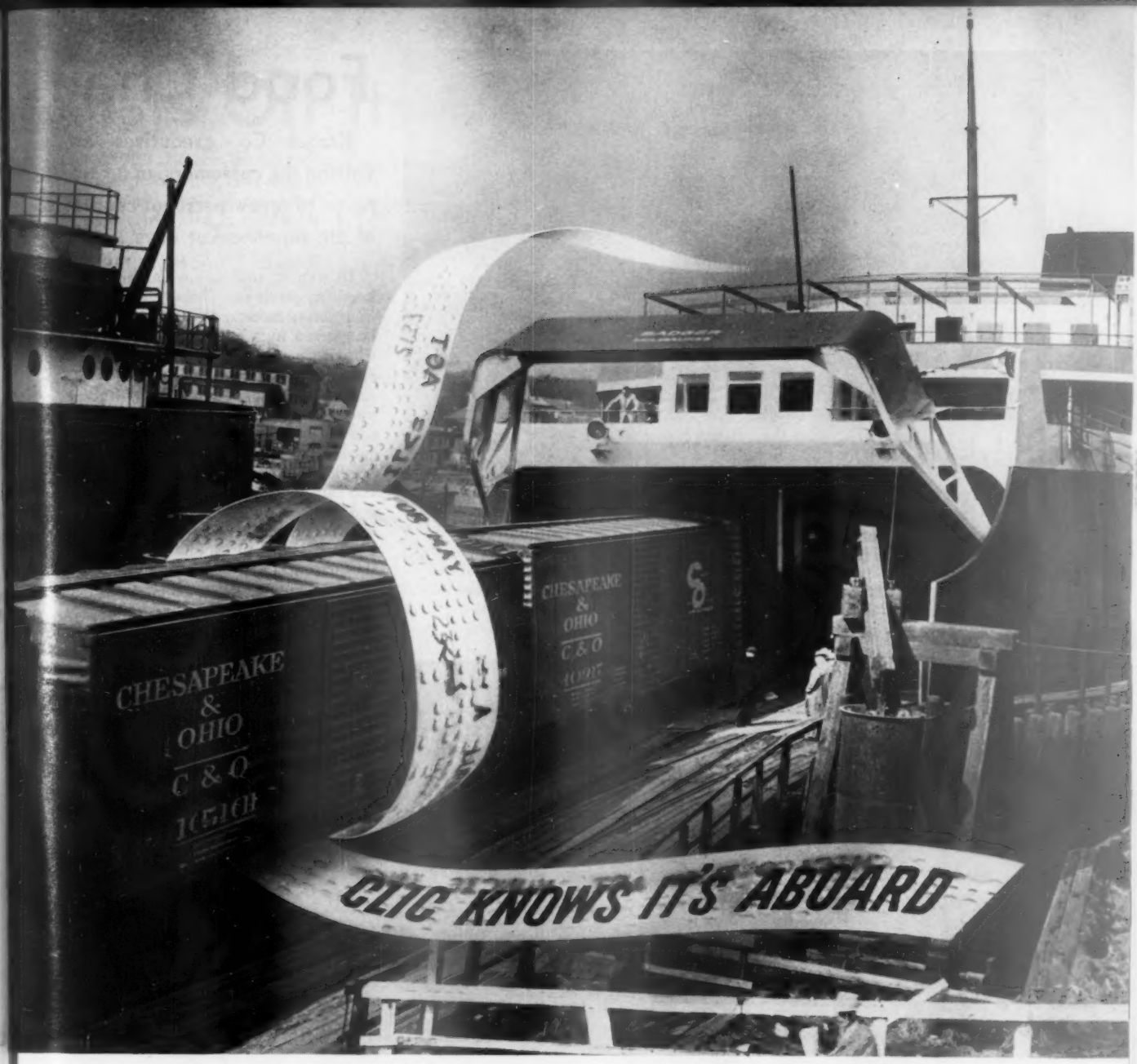
At the least, events in the market place suggest that the supplier is stepping in more frequently in the early stages of a new station's life. Big stations are a prerequisite for an adequate job in today's heavy traffic, high-speed civilization, a Shell Oil executive points out. The average modern service station requires a $30,000 to $60,000 investment, and it may run much higher. Independent dealers often just don't have that kind of money.

• **Big Businessmen**—Thus, a company often starts out a new station with an operator on a commission basis. As the volume builds up, and the operator gains experience, he normally would be expected to take over control and become an independent operator of property he leases or owns. Sometimes, though, he prefers the original setup.

The fact that the station operator is turning into something close to a big businessman goes far to explain the heavy emphasis that many companies are now putting on dealer training. The day of the pump jockey is dead.

Yet many majors do not view company operation as the answer. A sharp cleavage shows up in some companies between the high-traffic stations and the neighborhood station. Thus, Standard of California's subsidiary, Standard Stations, Inc., owns and operates some 1,100 service stations; these are located mainly on high-traffic highways and arteries. Standard of California's 7,200 Chevron dealers, on the other hand, are independent dealers, and are mainly community stations. Most companies agree that the neighborhood dealer still is the bulwark of the business.

• **Legislative Threat**—The industry is unhappily alive to the threat of divorcement, which Rep. James Roosevelt has brought back to life in his House Small Business subcommittee. If the threat ever materializes, says one marketer, then the industry will have to choose—between complete company operation or complete independent operation at the retail level. **END**



CLIC (Car Location Information Center) watches over Chesapeake and Ohio everywhere—on land and on water. The water in this case is the C&O Train-ferry route across Lake Michigan, the time-saving year-round shortcut between East and West.

Chessie's electronic car reporting is fast and accurate. CLIC relays up-to-the-minute history and location concerning any freight car on its system, to all C&O freight traffic offices in its coast-to-coast, Canada-to-Gulf network. Thus, alert C&O traffic people keep shippers and consignees informed.

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Added benefits from CLIC come to our attention daily, as customers discover new ways to take advantage of this flexible, modern car reporting service. Yours may be another. Specify C&O routing to see.

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SHIP C&O . . . AND WATCH IT GO!

REPLICA of wagon used by founder Barney Kroger sets off on first leg of "Kroger Calls" campaign, with Pres. Hall (right) and Vice-Pres. C. Olaf Talla at reins.

Food Chain

Kroger Co. executives are visiting the customers, in a campaign to renew personal contact of pre-supermarket days.

In a neat middle-income neighborhood in outlying Detroit last week, housewives answered their doorbells to be greeted by a tall, hearty, gentleman who began his spiel with: "Good day! I'm from the Kroger Co. I'm Mr. Hall."

Then, as a door-opener, the smiling middle-aged man proffered a folder, adding, "First, I'd like you to have this small gift . . . a sewing packet of needles. Do you sew? Well, fine, then I'm sure you can use them."

With this approach—well-known and long-practiced by salesmen for Fuller Brush Co.—Joseph B. Hall, president of the nation's third-largest supermarket company, more often than not gained admittance to Detroit homes. In all,

BOND is established with Mrs. Russell Gutow when she discovers that both Hall and her son are Phi Beta Kappas.

Dusts Off Its Calling Cards

some 300 Kroger executives—ranging from top men like Hall down to store co-managers—rang an estimated 30,000 doorbells last week in greater Detroit.

I. The Personal Touch

"Kroger Calls"—as newspaper and TV ads heralding the campaign explained—is the beginning of a new tack in modern merchandising: re-establishing the personal contact and friendliness that once existed between small merchants and their customers but has become lost in the era of self-service markets.

Detroit is just the start of the personal touch campaign, according to Kroger executives. If it proves to be as successful as early results indicate, in the next two years neighborhoods surrounding every one of Kroger's 1,400 stores will be visited. Beyond that, regular annual customer calls by every store manager may be instituted.

• **Immediate Benefits**—Kroger sees more than the long-range aim of improved customer relations in the calls. For one thing, the executives and store managers ask the housewives firsthand what they like and don't like about Kroger's and other supermarkets where they trade. "You can learn much more from talking to people directly than you can from surveys," propounds Hall, who has been president of the chain since 1946.

There's the obvious promotional value, too. Advertisements run in advance of the calls in Detroit told shoppers they would get two full books of Kroger's Top Value trading stamps worth about $8 if they could show a recent receipt tape from a Kroger market for over $5 worth of purchases. This built store traffic.

And the word got around in the neighborhoods where the calls were being made, store managers found. In Detroit, the calls began Tuesday morning. Wednesday morning is usually a dull day in supermarkets because the food ads don't appear until Wednesday afternoon. But last week housewives hustled to Kroger markets on Wednesday morning.

• **Tapes**—The receipt tapes themselves have a new device—the "personal word guarantee"—tied into the "Kroger Calls" programs. On the reverse of each itemized supermarket receipt is printed a promise (from the store manager) to replace any unsatisfactory item or refund the purchase price. This was stressed in ads and by the callers.

II. Completion of a Cycle

To Hall, a University of Chicago graduate who was in real estate and banking before joining Kroger Co. in 1931, the return to a personal relationship between merchant and customer is the end of a cycle.

Most present supermarket chains, he explains, were started either as gen-

IN SUPERMARKET, Hall introduces himself to Mrs. F. W. Schoelch, gives her a coupon for trading stamps.

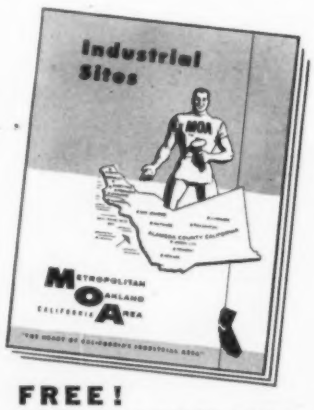
VISIT with Mrs. Leslie Menyhart makes a hit with the kids, while Hall probes for comments on his own and other neighborhood markets.

Are You Selling These 25,000,000 Buyers?

THE GROWING WEST IS A BUYING WEST!

Retail sales in the 11 states of the West exceed $33,000,000,000 a year. Per capita, that is 10.9 percent above the national average. At that rate, the 25,000,000 people of these states have buying power you cannot overlook.

You can reach this busy, building, booming, *buying* market best from a location in the Metropolitan Oakland Area on the sunny mainland side of San Francisco Bay.



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Grow with the growing giant of the West... MOA!

eral stores or—as with Barney H. Kroger in Cincinnati 76 years ago—in a horse-drawn grocery wagon. The merchant had to know his customers, and vice versa. This relationship continued when specialty food stores were in their heyday—meat markets, bakeries, etc.

• **Change**—When large, self-service supermarkets were introduced in the late 1930s, the relationship began to change with the stores, Hall says. Less than a dozen years ago, there were nearly 2,400 Kroger stores. Today, with the number cut by 1,000, the total floor space has doubled and the number of items carried has gone from something like 500 to 5,000. Customers shop mainly by car, may go to several supermarkets—in pursuit of "specials"—and the personal touch can be lost.

• **Approach**—Some supermarket chains and independents carry much more than food items—hardware, clothes, appliances, etc. "We have been more conservative in the area of non-foods than many of our competitors," says Hall. "Our thinking may change on this, but at present our main interest is doing a better job with foods."

Now, he believes the supermarket may be falling back in place as the general store of yore. "It has become a popular neighborhood meeting place with important social as well as marketing functions." Some Kroger markets, for example, have free bulletin boards for community announcements and want ads.

• **Chance**—Kroger Co. fell on the personal call technique almost by accident. A year or so ago, a new market was opened in an older, built-up section of Pittsburgh. Without a big parking lot and not in a shopping center, it failed to attract customers. So the local manager went out through the neighborhood making calls. The results, when compared with the performance of other stores in the Pittsburgh division, started Hall and his associates thinking. In cooperation with the Kroger advertising agency, Campbell-Mithun, Inc., the details were worked out and the program started in Detroit.

As a promotional gimmick to symbolize the humble beginnings and personal relationships the founder of the Kroger chain had, a replica of Barney Kroger's horse-drawn wagon was obtained and used to start the calls, with Hall and Detroit District Vice-Pres. C. Olaf Talla at the reins.

III. The Calls

The area where Hall made his calls is approximately four square miles surrounding the brand new Kroger store near Grand River and Southfield in northwest Detroit. Homes are mostly brick Cape Cods and Colonials, range from $15,000 up to $50,000. In the quadrant where the company president rang doorbells, he worked with the advantage of a local store manager known by first name by many customers and with the drawback that the somewhat nearer old store had been more convenient and handy to pedestrian shoppers.

• **Informal Chat**—At the front doors and in the living rooms, Hall took to the task with folksy enthusiasm. Though on a tight time schedule, he chatted casually with pin-curled and house-coated matrons like an old family friend.

One technique Hall found was to establish common interests quickly. In one modest home, an engineering honorary society plaque was on the mantel. When the housewife added that her son was also a Phi Beta Kappa, Hall effervesced: "Well, so am I and so is my son! Here, let me show you the handshake—it's just like the Boy Scouts'." They spent 10 min. discussing their sons' respective careers. At another house, when the woman explained she thought Hall's doorbell ring was the upholsterers returning some living room furniture, he launched into a description of the problems Mrs. Hall had recently had getting the right color in the new material for her dining room chairs.

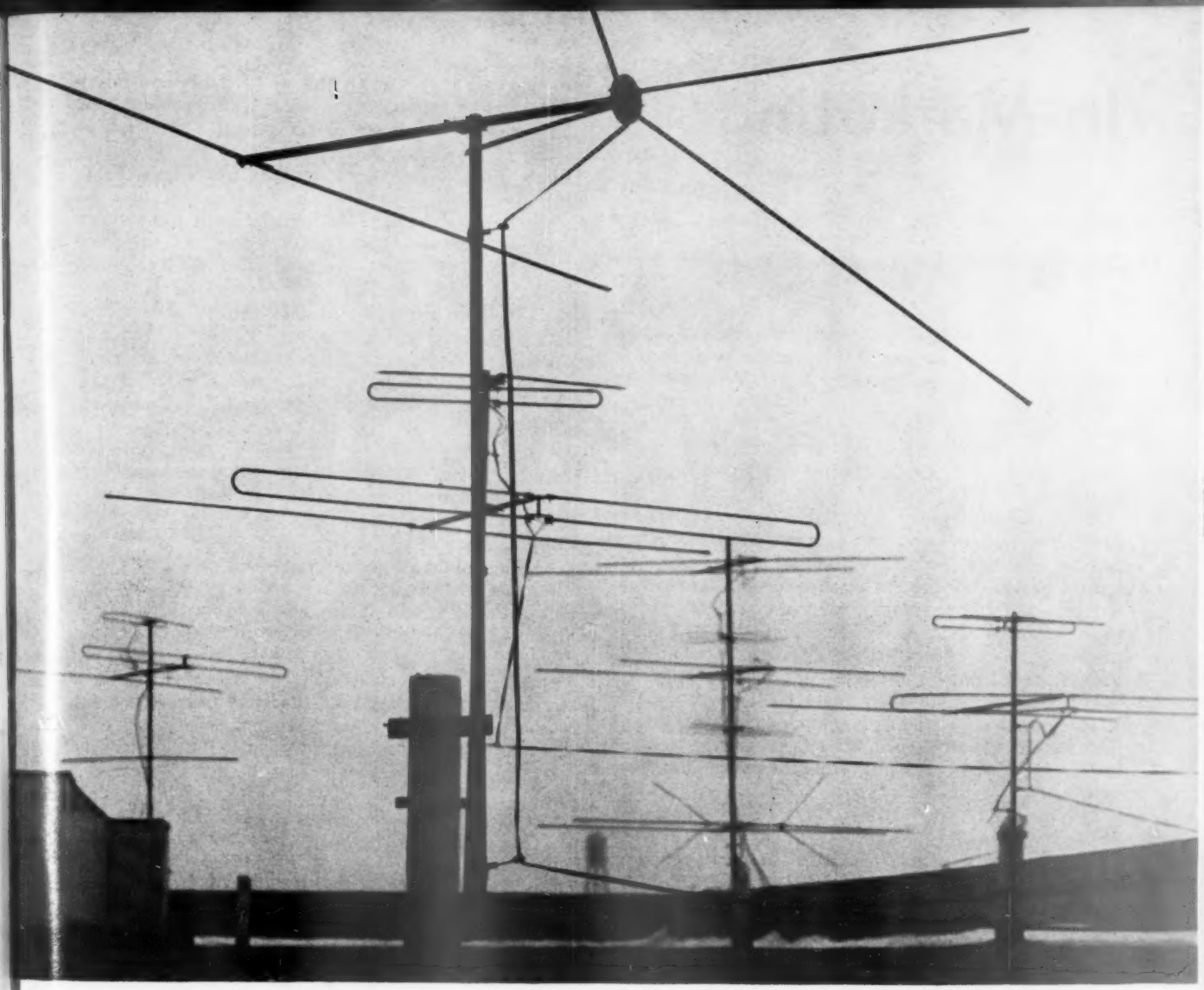
• **Gentle Probe**—In and around the small talk, Hall probed for comments on his own and other negihborhood markets. Do you know the manager? What do you like about the new store? What don't you like? What's your favorite dish? Would you like us to eliminate stamps.

Actually, the housewives had few criticisms. One complained about a meat counter employee smoking. ("He shouldn't—that's against our rules.") Another thought the air conditioning in the new store was too cold. A third, in reply to a direct question, said she didn't like the popular brand of coffee sold by Kroger. She named another brand. "That's very good coffee," Hall agreed.

Woven into the questions were a few points Hall wanted to make. He casually mentioned he was the president of the company, up from Cincinnati to start the personal calling campaign. Kroger employees had profit-sharing, he pointed out.

As he left those housewives who were not Kroger customers, he asked: "Go over and see Pete McLaren, the store manager. Get acquainted. Tell him Joe Hall sent you and here's a coupon for a free pound of coffee."

One housewife mechanically noted Hall's name on a piece of paper without being aware that the president of the fourth-largest retail operation in the country had been her midmorning caller. **END**



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In Marketing

• • •

Fedway Goes Out After New Stores To Expand in the Smaller Cities

Federated Dept. Stores, 43-store chain doing an annual volume of $653-million, has decided to expand its Fedway Stores division, a group of nine medium-sized department stores serving smaller cities in the Southwest and California.

Edward E. Watson, Fedway president, said his division seeks to acquire established stores in trading areas of 100,000 to 300,000 with annual sales volume between $4-million and $10-million.

This is a shift in policy. When Fedway was launched in 1952, new stores were built with the idea of wedding two merchandising concepts—the chain store such as a Penney's or Sears with the department store group system similar to Federated's. There has been no major expansion by Fedway since 1955, (BW—Feb.5'55,p60), partly to give the pioneering chain-department store system a chance to work out bugs.

The shakedown period apparently is over and, says Watson, Fedway's operation is smooth enough "to establish new Fedway stores in other cities while continuing to expand our operations in existing stores."

• • •

Mover Signs Up Real Estate Brokers To Help Its Customers Relocate

North American Van Lines, Inc., has signed up with a St. Louis-based realtor to create what it hopes will become a nationwide real estate merchandising service as a sales tool for its moving business.

As prospective customers of North American, families moving from one city to another can get a free, photo-illustrated brochure of specific homes for sale in each of 140 cities in 23 states. Included is information on location, price, financing, construction. The information is gathered and prepared by Arms Institute, Inc., a St. Louis company set up in 1958 to act as a central clearing house for some 300 franchised brokers. The goal is 50-state coverage by March, 1960.

North American also routes information through the Arms Institute realtor system for customers who want to sell their homes. Companies shifting personnel can also make use of the service.

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Duty-Free Shopping in Canada To Be Offered to U.S. Tourists

A Canadian, British, and American syndicate has started building the first of about six "freeshops" planned along the Canadian-American border where U.S. tourists can purchase luxury goods free of all duties and taxes.

The first "freeshop," consisting of a sales sample room and a bonded warehouse, is being built at Hill Island in the St. Lawrence River adjacent to the Thousand Islands Bridge. A second is planned for Niagara Falls, Ont.

John David, a former British civil servant and now an American citizen, heads the syndicate. Companies involved in the financing are Empire Trust Co. of New York and Close Brothers of London, each of which raised half the $800,000 to launch the first two shops. Others in the syndicate include Manifund, Ltd., of Montreal; Canadian & General Development Corp. of New York, and United North Atlantic Securities of Toronto. Henry Morgan Co., Montreal, will supervise merchandise.

As the promoter, David has been buying up land for the project, which is similar to the duty-free shops operating at international airports such as Shannon, Amsterdam, Paris, and Montego Bay, Jamaica, and on transatlantic ships and airliners.

All kinds of luxury goods—from wood carvings to German cameras—will be on sale. Under U.S. customs regulations, U.S. visitors will be able to buy $200 worth of goods duty-free after 48 hours in Canada, $500 worth after a visit of more than 12 days. At the sales room, they receive a receipt for what they purchase. Goods are mailed to their homes. Canadian officials will keep a close watch on the bonded warehouses, where goods imported for re-export are held without duty payments, to see that no sales are made from the floor or to Canadians.

Estimated savings for tourists run between 25% to 40% below the same items in stores either in the U.S. or Canada. The syndicate picked Hill Island and Niagara Falls because it estimates that 90% of U.S. tourists enter Canada by these routes. These tourists spend $90-million a year, of which $22.5-million is for merchandise.

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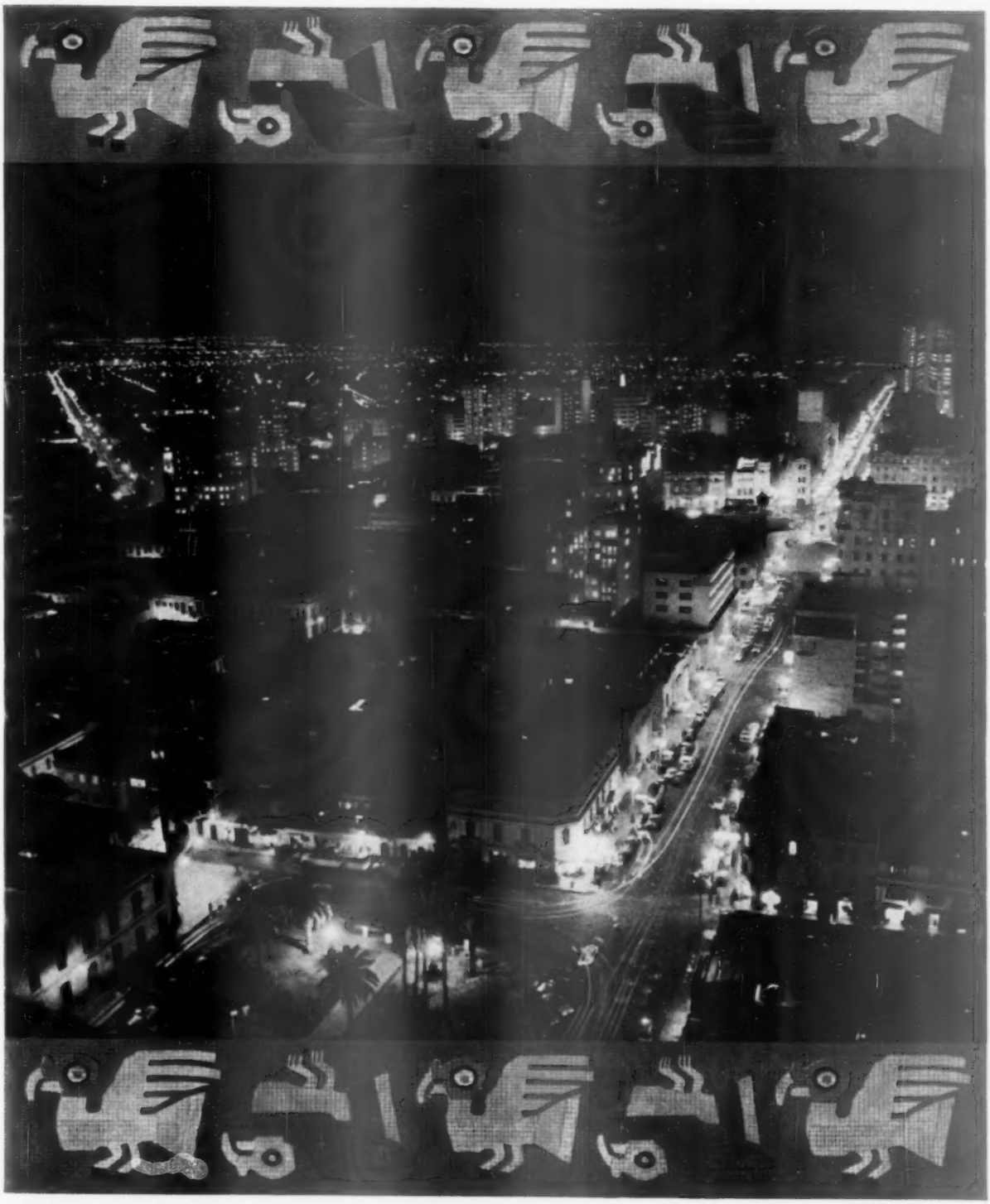
CBS Launching Public Affairs Program At Choice Hour on Tuesday Nights

This week CBS took the wraps off its pioneering venture in prime time public affairs programing. The network will present 12 shows this season treating controversial topics, such as the exploding population problem in hour length documentaries scheduled to start at 10 p.m. on Tuesdays. Present plans call for expanding the series to a 52-week basis within two years. **CBS hopes the series will lead public affairs programing out of the "intellectual ghetto" of Sunday afternoon.**

Bell & Howell and B. F. Goodrich will sponsor the shows. Bell & Howell will use the series as a hard sell vehicle. Goodrich, which has been out of TV entirely for several years, considers the series primarily as an experiment in using TV as a medium for institutional exposure.

CBS figures it will have to pay a stiff part of the tab for the venture. It estimates the series initially will draw only around half the rating of regular programing. **So it is charging sponsors only half-price.**



LIMA *is the Capital of Peru where native weavings have been traced back as far as 2,000 B.C., predating ceramics. Lima, "City of Kings," with a population of 1¼-million, has long been noted for its many examples of fine Spanish architecture. Today, dramatically contrasting modern buildings tower above the streets trod by "conquistadores" who founded Lima in 1535. In a city where quality is a tradition, it is highly complimentary to have the OTIS tradition for quality recognized by progressive builders who prominently display the slogan "Mas Ascensores OTIS" (More OTIS Elevators)—the world's finest.*

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INTERNATIONAL OUTLOOK

BUSINESS WEEK
OCT. 24, 1959

Gen. de Gaulle has upset Pres. Eisenhower's timetable for East-West negotiations at the top level. This week the French President flatly refused to attend a summit meeting before spring.

Eisenhower wanted a summit session before the end of the year—to try for an interim agreement on Berlin and to lay the groundwork for later talks on disarmament. The followup on disarmament might have come at a second summit or during Eisenhower's visit to Moscow in June. In any case, such a timetable would have freed Eisenhower to concentrate on his legislative program during the early months of the new session of Congress.

Now it looks as though a summit meeting may be off until April. For de Gaulle can make his veto stick if he wants to. Washington won't risk splitting the West (and encouraging Khrushchev to play on Western divisions) by pushing for summit talks without the French.

The thing to watch for now is a meeting between de Gaulle and Khrushchev. At midweek there were reports in Paris that the two men would get together soon. There's no doubt that one of the things behind de Gaulle's stalling is pique over being the only leader of the Western Big Three who has not yet met with Khrushchev privately.

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Washington has shifted to a policy of tying foreign economic aid to the purchase of U. S. goods. Although the new policy won't have much effect for some time, it's definitely part of the Administration's effort to cut down the deficit in the U. S. balance of payments (BW—Oct.10'59,p145).

This week the Development Loan Fund announced that almost all future loan commitments will be put on a "Buy-American" basis. Up to now the DLF has allowed borrowing nations to spend their loans wherever it suited them. As a result, about half the $90-million that DLF has disbursed so far has been spent in Western Europe and Japan.

At the same time, the International Cooperation Administration will start applying the "Buy-American" principle to some of its grants. Though this probably will be done on the quiet, by administrative changes, the effects may be felt sooner than in the case of the DLF. The latter has $800-million in commitments that don't come under the new rule.

The Administration is using two other methods to cut the U. S. payments deficit. We now are getting other nations to drop special restrictions against U. S. goods. Also, the Pentagon is planning to cut down somewhat on U. S. military expenditures abroad.

Removal of what's called "dollar discrimination" will widen the potential market for U. S. goods. It will help boost the total of our 1960 exports, assuming American exporters take advantage of the new opportunities.

The cut in U. S. military spending abroad will be achieved by trimming the "frills" that our foreign-based forces have become used to—things such as the large number of non-military personnel and the generous provisions for maintaining Army and Air Force families overseas. This kind of budget-cutting will reduce the outflow of dollar payments to our allies, especially West Germany, Japan, Britain, and France.

There is no way to calculate precisely how much the U. S. payments

position can be improved during 1960 as a result of these three developments. But, at a rough guess, the combined effect should be at least $500-million on the plus side.

Considering that our total deficit this year will be about $4-billion, **such a saving may not seem like much.** But remember that next year the U. S. should be getting close to $500-million extra from foreign sales of passenger jets and an additional $250-million from exports of raw cotton. If you then allow for the over-all effect on our exports of the business boom in Western Europe, you can see our deficit shrinking in 1960 to $2.5-billion or even less.

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London has just loosened up on currency restrictions for British citizens going abroad—giving them the right to get enough foreign currency (including dollars) to travel quite freely. Up to now, the restrictions have had an anti-dollar bias, thus limiting the amount the U. S. earns from tourism. A similar British move on trade—freeing dollar goods from discrimination—can be expected soon.

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Some important shifts in the U. S. position on disarmament will come out of a policy review now under way in Washington. It's too early to pinpoint the changes. But U. S. thinking on controls seems to be changing. This will show up in the U. S. disarmament package that will be submitted early next year to the new 10-nation disarmament committee.

Up to now, Washington has insisted that there must be foolproof controls with any phase of disarmament. Now there is a feeling that "deterrent" controls would work—something corresponding to our basic military strategy of maintaining adequate deterrent strength rather than absolute military superiority.

Deterrent controls would be designed to cause potential violators of disarmament agreements enough trouble, expense, and political embarrassment to make a violation unlikely, rather than to guard against every possibility of violation.

—•—

Premier Khrushchev has just launched a program to boost the output of consumer goods in the Soviet Union. The big increase will come in consumer durables—things like TV sets, refrigerators, washing machines, vacuum cleaners, and sewing machines. According to the new Soviet decree, 1962 output of consumer goods will be 42% higher than that of 1958. State spending in this area will go up by 20-billion rubles.

It may be significant that Khrushchev launched this program soon after his visit to the U. S. It looks as if he is under pressure to give the Russian people some concrete proof that his peaceful coexistence policy amounts to something.

With this program, Khrushchev seems to have returned to the economic policies of ex-Premier Malenkov, the rival he ousted. Over-all, of course, Khrushchev's program amounts to more, since it starts from a bigger base. But note that the promised increases are no more than a restatement of the goals set in the Seven-Year Plan. **The really new element today is a system of installment credit,** which started Oct. 1 in some 50 Soviet cities. Apparently the state has set aside about 10-billion rubles to finance the new consumer credit system.

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NEW CONCEPTS IN PRACTICAL OFFICE AUTOMATION

LABOR

A New Chair at Bargaining Table

● **Deadlock in the steel strike has convinced the Administration that the Taft-Hartley Act is inadequate.**

● **From now on, the government will play a more prominent role in negotiations.**

● **One proposal is to put a Presidential fact-finding board in all big disputes before they reach emergency state.**

When Pres. Eisenhower moved this week for an injunction to stop the steel strike, it had lasted just short of 100 days and almost nothing had been settled by collective bargaining.

But the steel strike did settle one thing:

From now on, the government will take a prominent seat at the bargaining table in major disputes. The big question is whether it sits at the head of the table or attends as an invited guest.

Either way, federal intervention is coming. The President, a firm exponent of "free collective bargaining" without White House intervention, conceded that "it has not worked" as he took the final step under the Taft-Hartley law to halt the steel strike for an 80-day period.

I. T-H Falls Short

Eisenhower had invoked T-H's 80-day "cooling off" period in seven previous strikes "affecting the national health and safety." But this time the Administration is admitting that T-H no longer is enough.

Labor Secy. James P. Mitchell promptly called for a new amendment to Taft-Hartley that would put Presidential fact-finding boards in all big disputes—before they reach the emergency stage as did the steel strike. It is likely the Administration will ask this from the next Congress.

A variety of other suggestions are being readied for Congressional action on the theory that the steel dispute will still be around next January to keep the issue hot. Even if the steel negotiations should somehow come up with a solution, the die has been cast for more federal intervention in the negotiating process.

• **Appraisal**—Nobody is satisfied with Taft-Hartley's provisions as they stand. Mitchell gave it this appraisal:

"I think the record shows that the 80-day injunction process has not proved to be a very reliable instrument in settling strikes." Steel industry officials feel the same way, and David J. McDonald, president of the United Steelworkers, promised a resumption of the walkout when the injunction lifts unless a contract has been reached (page 25).

In 15 previous Taft-Hartley injunctions, only five disputes were settled during the 80-day period. The issues in the steel contest are much tougher to resolve than any of the others.

While the dispute is under the Taft-Hartley damper until early January, the Eisenhower Administration, Congressmen, and federal mediators are using the time to seek new methods to solve such critical strikes.

II. New Proposals

The ideas being discussed in Washington vary widely from out-and-out government-dictated settlements to more subtle pressures on labor and management negotiations. But one theme runs through all the proposals—that it is the government's responsibility on behalf of the public to step in and help the disputants to come to an agreement when they can't resolve it on their own.

"Where national interests are at stake," says Walter Lippmann, "the national interest is paramount."

Here are the major suggestions being seriously discussed:

Make a Presidential fact-finding board a "regular part of the mediation process," to put the facts before the public in open hearings, to make recommendations only if asked by both sides. The plan, proposed by Mitchell, would have the President move the boards into negotiations "well in advance of an emergency."

Invoke compulsory arbitration if a strike resumes at the end of an 80-day injunction. This plan, newly advanced by Sen. John Sherman Cooper (R-Ky.), would be aimed at pressuring the parties to settle by the threat of arbitration.

Permit voluntary arbitration as an extra Taft-Hartley step, to be formally proffered to both sides as part of the legal processes. This is a favorite of Dr. George Taylor (chairman of the steel fact-finding board), and other professional arbitrators as a way to bring public pressure on both sides to accept.

Set up a national board before which labor and management would have to account publicly for their moves—both on wages and prices. This would be an extension of the price notification proposal of Sen. Joseph D. O'Mahoney (D-Wyo.), which would require the companies to justify any price increase at a public hearing—including the one they claim would come from a wage raise to employees.

Apply the antitrust laws to unions. This idea has been introduced in Congress each session in recent years. The goal is to break up union "monopolies" by banning industrywide bargaining and industrywide strikes that can cause national emergencies.

III. Public Domain

Inherent in all such suggestions is the feeling that the major disputes, when they get out of hand, no longer are in the private domain of the unions and employers. Taylor says: "This is no longer a private dispute between private parties." He also noted that the strike was helping to bring about the inflation that the steel industry hoped to avoid.

The debate should reach a peak at the time Congress comes back to Washington.

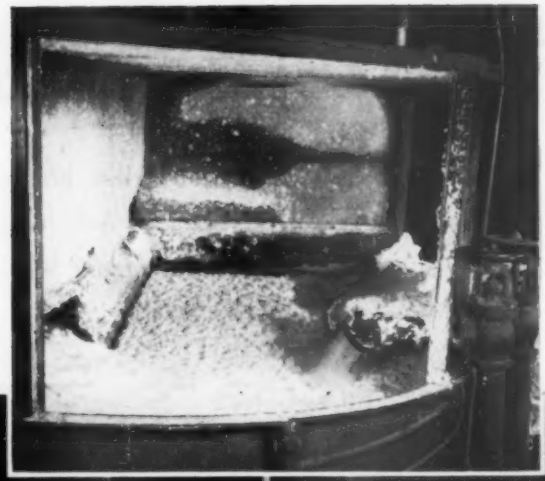
Mitchell took his new legislative ideas from the Taylor board's actions. This, he said, "is exactly what I have in mind." But he wants it done before the legal machinery of the Taft-Hartley Act is involved.

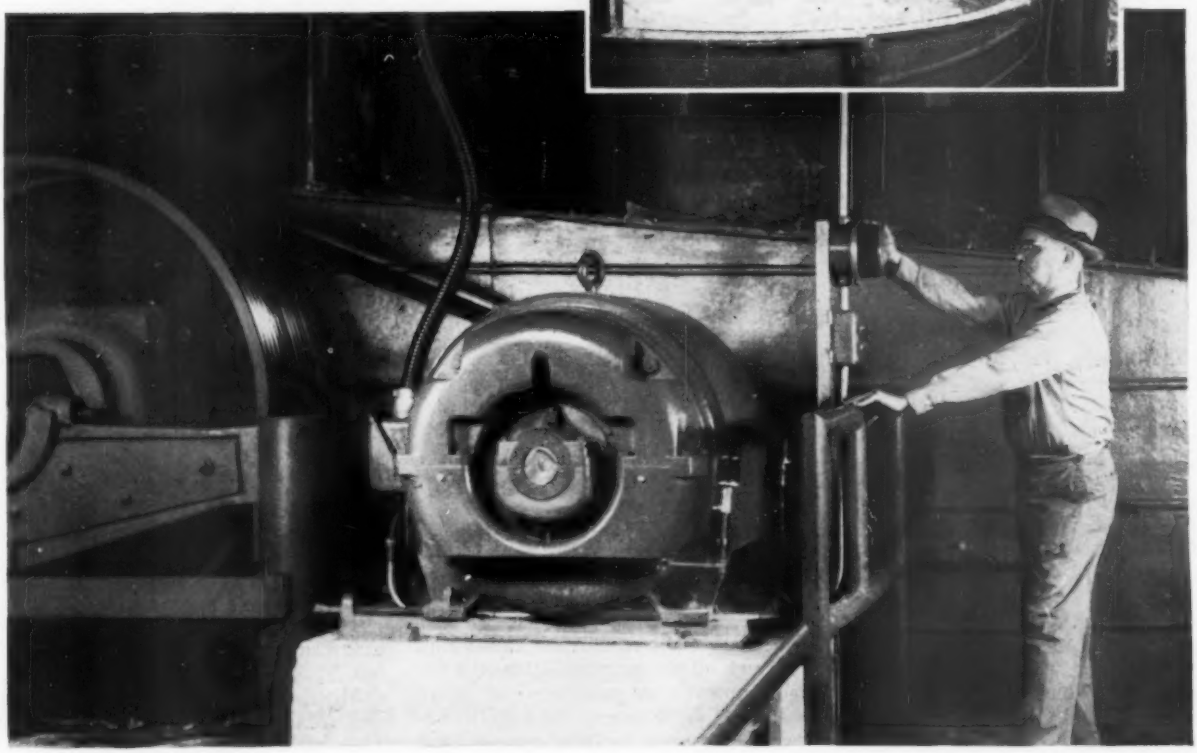
• **Progress**—With the pressure of a one-week deadline, Taylor and the other two board members—Dr. John A. Perkins, president of the University of Delaware, and Dr. Paul N. Lehoczky, labor relations professor, Ohio State University—moved the parties much closer to settlement.

"It is a pity the kind of collective bargaining in public you witnessed today was not undertaken by the parties months ago," Taylor said at the conclusion of what he said was "the first time I have mediated in the open."

In a way, the steel board of inquiry was a test of the technique suggested by Labor Secy. Mitchell. The fact that it did not settle the strike without an injunction cannot be interpreted to be a failure for the technique. Because of the nature of the steel issues—and the

HOW TO BEAT A TON OF PULP...





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anger and emotionalism in the dispute—a settlement was almost beyond the most optimistic hopes of the board in the few days that it had.

• **Added Power**—Mitchell's idea is to use "Taylor boards" at any time a dispute seriously involves the public welfare. The director of the Federal Mediation & Conciliation Service would be authorized to request the establishment of a board, and the President to name one, to "clarify issues in a public hearing (and) make those clearly stated issues a part of a public record." The board would have subpoena powers and the authority to hold public hearings and require testimony—powers that FMCS lacks.

The degree of involvement of FMCS in the special fact-finding process could be an issue if the board proposal reaches Congress. The mediation service is a confidential agency, privy to the secrets of both sides in disputes. It uses this background information judiciously, but is bound not to reveal it.

• **Opposition**—Mitchell's suggestion that the director of FMCS might be empowered to request public board hearings disturbed some in labor and management who use the board from time to time. They warned that it might lead to more secrecy, less confidence in FMCS, and consequently less effectiveness for the board.

The Mitchell proposal has been the most concrete so far, but suggestions involving giving the government more scope in serious bargaining deadlocks can be expected.

• **No Alternatives**—The Taft-Hartley Act, as it stands, has no alternatives: If there is a threat to the national health and security, the law must be invoked and specified procedures must be taken, step by step, with a timetable. The most drastic modification yet suggested would knock out the 80-day provision in the injunction clause; a restraining order would be allowed for 10 days or indefinitely, with the President authorized to petition for a dismissal at any time on the recommendation of fact-finders.

UAW Tackles Money Troubles

Convention, faced by deficit, meekly votes dues hike; but also gives pay boost to staff, including Reuther.

It costs more to run a union nowadays, just as it does a business. This blunt fact was brought home last week to United Auto Workers convention delegates by a report that the powerful 1.14-million member union has been operating in the red since early 1957.

UAW Secy.-Treas. Emil Mazey, who is a militant in everything but his handling of union funds, reported that the total resources of the union had decreased $8.4-million since March, 1957. This was due, he explained, "primarily to expenditures in excess of income in the Strike and General Fund." With a solid column of red figures to back them up, Mazey and the UAW officers appealed to the convention to authorize a dues increase.

"You want more political action, more education, more service," one union official shouted into a convention microphone, "then you got to give us the money to do the job."

• **Without a Battle**—Traditionally, a request for a dues increase brings up an intense, sometimes bitter fight on the convention floor. Delegates frequently use a dues fight as an outlet for all the accumulated frustrations that are often felt by rank-and-filers about union policy and actions. And it's a sure bet that a dues hike is not likely to be popular back home.

But this time there was no large-scale opposition among the delegates. Most were resigned to the necessity of jacking up the dues from $3 a month, plus a $1 strike fund assessment, to $5. "There was more opposition," a UAW staffer recalls, "to a lesser dues increase in 1957 than this year."

• **Futile Efforts**—The money troubles arose out of membership losses. The union lost last year some 25% of its 1957 1.3-million membership, which reduced its per capita income by $5.2-million in 1958. (It has recouped somewhat this year.)

"If we had been organizing and getting new members," a delegate declared from the floor in the heat of the dues debate, "we wouldn't need the dues increase." But most delegates knew—and if they didn't they were repeatedly told in the 16-and-a-half hour debate—that the deficit was one prime reason for the halt in organizing.

Economy measures had not proved sufficient, Secy.-Treas. Mazey informed the delegates. The 771-member union staff was cut to 573. Officers and staff took 10% and 5% pay cuts for 18 and 16-week periods respectively. The union paper was cut from a weekly to a monthly publication schedule. But with all this, the union was still left with an annual $2.7-million deficit.

• **Budget**—It's tough to argue with the ledger. So the delegates approved the dues boost. As a result the auto union's total income will average $70-million a year. The international union will get $1.75 a member, an annual goal of $25-million; $2 a member per month will go to the locals, or some $28-million a year; and $1.75 to the strike fund, or $18-million a year.

What will this money be used for? Organizational expenses, of course, are rising. The convention authorized a 3% salary increase for officers and staff members, spread over three years (roughly a boost of $670 in each of the three years for UAW Pres. Walter P. Reuther, who now gets $22,000 a year). A white-collar drive in autos, farm equipment, and aircraft is in the offing; this will eat up more cash. UAW Pres. Reuther has also pledged a new push for a shorter work week, and that, too, will necessitate the use of more money.

• **Health Plan**—The convention also adopted a constitutional amendment that will give the secretary-treasurer, with the approval of the executive board, a freer hand in investing union funds. In the past, UAW investments were severely circumscribed. Funds in excess of $250,000—which had to be in banks—had to be mostly in government bonds; not more than 40% of the excess could be invested in securities considered legal investments for life insurance companies incorporated in New York State. Most of such UAW funds are in bonds, mortgages, GMAC debentures.

The immediate purpose of the amendment is to clear the way for a UAW investment in the Community Health Assn.—the UAW's comprehensive medical care alternative to Blue Cross and Blue Shield. A convention resolution authorized an investment up to $5-million in housing and hospital care, the money to come out of the strike fund. This will enable CHA to get off the ground and bring UAW a higher return for strike fund monies than the union is now getting. The first step will be to expand hospital facilities to enable CHA to operate.

• **Peaceful**—This was the least fractious UAW convention on record. There was little opposition to Reuther—either on the dues question or on the salary increase. Nor was there any criticism of the auto contracts negotiated last year and due to expire in 1961. Delegates were united on political questions (BW—Oct.17'59,p155).

Delegates also passed a multitude of constitutional amendments designed to bring the UAW in line with the recently passed Landrum-Griffin bill. Most were minor changes. END

In Labor

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No Jobless Pay for Ohio Workers Idled by Strike at Related Plant

Workers laid off at one plant because of a strike in another plant of the same employer are not entitled to unemployment compensation, an Ohio court ruled last week, if the two plants are "functionally integrated." The Toledo plant where the layoffs took place, said the Ohio court, and the struck plant in Michigan constitute a single "establishment." In most states, laid-off employees are disqualified when unemployment is caused by a strike in the establishment in which they work.

The Ohio court took an opposite tack from that of a Michigan court (BW—Jun.20'59,p76). The Michigan court held that employees at three Ford plants in Michigan were entitled to benefits when laid off as a result of a strike at Ford's Canton (Ohio) plant. The Michigan plants were not part of the same "establishment" as the struck plant, the Michigan court ruled. The U. S. Supreme Court refused to review the Michigan decision.

• • •

Judge Rules Employees, Not Employers, Must Sue for Accounting of Welfare Fund

A federal judge ruled last week that employees, not employers, were the proper parties to a suit seeking an accounting of funds from an employer-union managed welfare fund.

Judge William J. Campbell said that it was "preposterous" for the employers to sue for an injunction to prevent further employer contributions when the money belongs to the employees. He made the ruling in dismissing a suit by the Employing Plasterers Assn. against Chicago Plastering Institute (BW—Oct.3'59,p128).

The EPA, representing 45 contractors in the Chicago area, declared that it would appeal the rulings.

The institute is a non-profit, union-employer agency into which contractors pay contributions for health-welfare benefits, insurance, and pensions for plasterers. EPA has charged that Institute funds have been misappropriated and sued for an accounting of some $8-million.

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Federal Mediators Work Out Settlement In West Coast Shipyard Strike

An eight-week strike that had closed all major private shipyards between San Francisco and Seattle, and idled some 18,000 workers, ended last weekend with the signing of a three-year contract.

The strike began Aug. 23 and at first involved only the International Assn. of Machinists. In the next two weeks, three other groups—the Marine Carpenters, the Steelworkers, and the Pacific Coast Metal Trades Council—joined the walkout against the 21 yards represented by the Pacific Coast Shipbuilders Assn.

At issue were wages and pensions. **Federal mediators finally worked out this package offer that was accepted by the unions:** An immediate 10¢-an-hour wage increase, with 8¢ retroactive to July 1; another 5¢ an hour on Apr. 1, 1960, for the pension fund; another 8¢ on July 1, 1960, for wages; another 5¢ on Apr. 1, 1961, for pensions; another 9¢ on July 1, 1961, for wages; and another 2¢ an hour holiday pay on Nov. 1, 1961, in addition to the 7¢ now received.

• • •

High Court Refuses to Review Rulings On Picketing and "Wrongful Discharge"

The U. S. Supreme Court this week, in effect, upheld two lower court rulings involving federal preemption in the field of labor legislation.

Left standing by the high court's refusal to review is a California's court's ruling **it could enjoin picketing under a state labor code without deciding the question of whether the Taft-Hartley Act gave the National Labor Relations Board exclusive jurisdiction over the dispute.** The case involved recognition picketing of a Trinity County, Calif., supermarket by a local of the Retail Clerks International Assn.

Also left standing is a Pennsylvania court decision that state courts no longer have the authority to hear a case in which **a railroad employee, discharged at union insistence because of late dues payment, alleges a wrongful discharge and seeks damage.** The Pennsylvania courts held that the federal government preempted the field in the Railway Labor Act of 1951.

• • •

Meany Forces Toledo Labor Merger

After more than a year of fruitless negotiations conducted by his special representatives, AFL-CIO Pres. George Meany unlimbered his merger shotgun to bring about the first forced amalgamation of state and city central bodies in the country. Targets of action initiated this week by Meany are the 32,500-member Toledo Industrial Union Council and the 28,000-member Central Labor Union.

Fewer than 15 city central bodies now remain unmerged, according to the AFL-CIO, and only two state organizations—New Jersey and Pennsylvania—have not joined forces.

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Carpenters' Head Faces Contempt Charges

A federal grand jury this week handed down several contempt indictments stemming from the McClellan probes into union malpractices, **including one against Maurice A. Hutcheson, president of the powerful Carpenters union.** Hutcheson was charged with having refused to tell the Senate committee whether he had used union funds in an attempt to fix an Indiana prosecution against him (BW—Apr.26'58,p47).

Western Electric Adopts Polyethylene For Telephone Cable Sheathing

Developed by Western to meet a long-recognized need, Alpeth, Stalpeth and Alpeth PIC cable sheaths have resulted in one of the biggest cost reduction cases ever closed by Western Electric engineers.

For over 60 years, from about 1883 to 1947, flexible lead sheathing protected nearly all electrical communication cable manufactured in the United States.

Because of the high cost and erratic supply of lead, cable manufacturers began testing substitute sheaths in the 1920's, but no practical replacement for lead was found.

At the close of World War II, demands for increased telephone service required increasing quantities of lead. Lead prices soared from 6½c per lb. in early 1946, to 21½c per lb. in 1948. To make matters worse, lead suppliers found it difficult to meet the booming demand for their product.

• **Search for Substitute Sheath.** Faced with the almost certain curtailment of cable production, Western Electric engineers and the Bell Telephone Laboratories immediately resumed their pre-war investigation of alternate sheaths and began an all-out search for a composite cable sheath substitute for lead.

Soon a revolutionary new sheath composed of corrugated aluminum and a polyethylene jacket was developed. It was dubbed Alpeth—coined from the words aluminum and polyethylene—and proved to be an effective stop-gap sheath, even better than lead, for these 3 reasons:

1. Moisture Protection. The prime function of cable sheath is to protect the cable core against moisture and mechanical damage. Alpeth provided a satisfactory degree of protection because polyethylene is one of the best organic moisture barriers in existence.

2. Lighter. Alpeth sheath weighed less than one-half as much as lead sheath. As a result, installation and shipping costs were less with Alpeth.

3. Less Expensive. Because of the lower cost of Alpeth's materials, substantial savings each year from 1948 through 1953 were achieved by substituting Alpeth for lead.

• **Develop More Permanent Sheath.** After Alpeth was developed, Western Electric engineers continued to search for a more permanent cable sheath which would completely seal-out moisture.

Stalpeth was the result of their efforts. Incorporating a new polyethylene jacket, as well as other new components, Stalpeth is measurably superior to both Alpeth and lead. And Stalpeth is conservatively estimated to provide good service for 30 to 40 years.

Most important, the introduction of Stalpeth again substantially reduced the cost of manufacturing cable.

Alpeth is now used as the basis of an even newer cable sheath, Alpeth PIC (polyethylene insulated conductor cores).

Spencer Chemical Company* has just been approved as a supplier of polyethylene used by Western Electric in the production of the Stalpeth, Alpeth and Alpeth PIC types of cable. The Spencer resin used by Western Electric ("Poly-Eth" 3812) is produced by a new polymerization process designed specifically to create a material with superior wire and cable jacketing properties.

For complete information about this Western Electric-approved resin, fill out and mail the coupon below.

POLYETHYLENE JACKET on Stalpeth cable sheath (above) is one of the best organic moisture barriers in existence. Stalpeth is estimated to give good service for 30 to 40 years, perhaps more.

*Spencer Chemical Company markets "Poly-Eth" Polyethylene from which polyethylene cable sheath jackets are made, "Poly-Pro" Polypropylene and Spencer Nylon. "Poly-Eth" and "Poly-Pro" are registered trademarks of Spencer Chemical Company.

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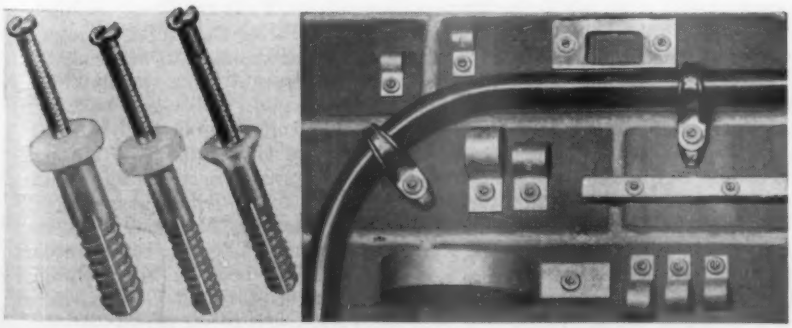

TOUGH AS METAL, these new "Tap-It" nylon anchors made of Spencer Nylon will not rust, corrode or conduct electricity. Produced in three sizes by Robert Q. Partridge Products, Inc., 7080 NW 37th Court, Miami, Florida, each size "Tap-It" is available with either a round or flat head (left). Photo at right shows variety of installations. Anchor is easy to remove when pin is extracted.

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☐ "Polyethylene For Wire and Cable"

☐ Facts about "Poly-Eth" 3812

Profits Dip, but Not Too Much

The third-quarter shrinkage is primarily in companies directly affected by the steel strike. The experts still think 1959 will set an all-time record of $50-billion.

Despite the longest steel strike on record, 1959 should be a record year for corporate profits. It's likely that total profits will hit a pre-tax level of $50-billion, which is far above the previous record of $44.9-billion in 1955.

This optimistic view emerges this week from the sprinkling of third-quarter statements that are appearing. It is confirmed by a new Commerce Dept. estimate that pre-tax profits in the second quarter hit an annual rate of $52.6-billion, a big jump over the $46.5-billion rate registered in the first quarter.

• **Strike Effect**—Third-quarter figures generally show a profit shrinkage—the first such decline since mid-1958. Steel, railroads, and other industries directly affected by the strike drag down the total. What makes the third quarter so encouraging is the fact that so many companies did better than in the first half. Some did even better than in the record-smashing second quarter.

That's why most government economists are revising their estimates for the year up to about $50-billion, while predicting even higher profits for 1960.

From this appraisal, the Treasury Dept. dissents. It is sticking to a prediction of $48.5-billion for the year. This would also be a new record high. It represents an upward revision of about $1-billion from the department's original estimate—a revision made last month. Treasury economists are sitting tight with the expectation that the profit-cutting effects of the strike will spread to companies not yet affected.

• **Having a Big Year**—This may happen. But, meanwhile, a broad range of companies are reporting their best sales and earnings in the first nine months. National Gypsum Co., for example, earned more than $9-million in the third quarter and $21-million in the nine months—an 18.5% increase over the same period last year on an 11.9% rise in sales.

Minneapolis-Honeywell Regulator Co. also reported a third quarter that was better than the previous two quarters. Of its $20.7-million profits in nine months, $8.4-million came in the third quarter. Libbey-Owens-Ford Glass Co. also had record nine-month earnings, but its third quarter was down from the first half because of vacation shutdowns and model changeovers. Eastman Kodak Co. reported a 32% increase in net in the third quarter, compared with year-ago figures, on a 12% rise in sales.

Most chemical companies showed big improvements. Allied Chemical Corp., for example, chalked up a record nine months of $546-million in sales, $39-million in net income. Similarly, Monsanto Chemical Co. had record nine-month earnings of $98-million, compared with $54-million a year ago.

Among other industries showing good results were paper, food chains, cement, autos. Ford Motor Co. recorded a spectacular rise—from a net of ony $1.2-million in the first nine months of 1958 to $339.1-million in the same period this year.

• **Last-Quarter Doubts**—But doubts are beginning to crop up. There's some fear that the last quarter will not be up to earlier estimates, and that the steel strike will begin to be felt in areas so far untouched. As Dwight P. Joyce, president of Glidden Co., puts it, "The steel strike is beginning to have an effect on sales—and we must expect lower earnings in the coming quarter."

However, any reopening of the steel mills should mean black ink for the steel makers and the railroads during the last quarter. Though total profits may not reach earlier estimates, which had run to an annual rate of $55-billion or even higher, the prospect is that the over-all dip in the third quarter will be reversed.

In any case, things look good for 1960. In fact, there may be a bulge—any decline that's suffered now may be compensated by the pushing of next year's profits to an abnormal level.

• **Profit Margins**—Some companies, though, cannot hope wholly to recover profits lost now. The length of the steel strike also is bound to have an effect on profit margins. Profit margins were improving fast during the first six months of the year and seemed likely to continue improving through the second half. But many companies are stuck with high fixed costs in a time of falling sales, and this will hurt profit ratios. Moreover, in the rush to restock after the strike, the zeal to keep down costs will tend to disappear. In time, this is bound to crimp profits.

Any drop in profit margins will be a double-edged sword, too, since the high quarter-to-quarter percentage gain in sales is tailing off.

A non-inflationary steel settlement, of course, could mean a new wave of better profit margins. If industry can keep its wage costs from rising too fast, it would find itself in the best position it has enjoyed at any time this decade.

Drug Probes

Price-fixing trial of Salk vaccine makers in Trenton is one of several attacks on the industry's practices.

Antitrust troubles for the pharmaceutical industry—developing over a period of years—are nearing the boiling point.

Basically, the antitrust attacks all center on pricing—and the trade practices used by the industry in researching, producing, and distributing the growing number of drug products:

• In Trenton, N. J., the Justice Dept. last week opened its case against the five Salk vaccine producers indicted last year by a grand jury for allegedly combining and conspiring to fix prices and to submit identical bids to government agencies on sales of polio vaccine.

• In New York, Federal Trade Commission hearings are nearing an end on charges that five major companies attempted to monopolize and fix prices on broad-spectrum antibiotics.

• In Washington, Estes Kefauver's Senate Antitrust & Monopoly subcommittee is readying its long-planned investigation of "administered prices" in the drug industry, with heavy emphasis on profits and possible ties between companies through common directors. Kefauver will start off on cortisone pricing Dec. 7.

• **Price-Fixing Trial**—Right now, the industry's troubles are being dramatized in the court room scene in Trenton at the Salk vaccine price-fixing trial. The antitrust charge: that beginning about the first six months of 1955 and up to Dec. 31, 1957, five companies—Eli Lilly & Co., Allied Laboratories, American Home Products Corp., Merck & Co., and Parke, Davis & Co.—engaged in an understanding or agreement to submit identical price quotations in bidding on sales of vaccine to federal, state, and other public authorities.

Many of the participants are well-known figures: Judge Philip Forman has been trying federal cases for 27 years. Thomas E. Dewey, defense counsel for Eli Lilly, the largest vaccine producer, has been in many criminal cases before. Gerhard Gesell, counsel for Park, Davis is one of the outstanding antitrust lawyers in the country.

The story goes back to August, 1955, when Congress passed the Polio Assistance Act, under which federal money

was to be spent for vaccine—either by having the federal government grant money to the states to buy vaccine or by having the federal government buy it and then ship it to the states under the allocation program adopted by the Health, Education & Welfare Dept.

• **Government Case**—Largely, the government's case is built on the identical prices received by some 33 public authorities from the five companies, all of which were authorized by HEW to make and sell the vaccine. (Cutter Laboratories, the sixth company licensed to sell vaccine, suspended its vaccine operations as a result of publicity concerning the purity and safety of its vaccine and never sold any to Public Health Service.)

But the government is asking the jury to infer an agreement on prices from what happened. Its attorneys say their evidence will show such things as refusal by the producers to fill orders by wholesalers who cut the price in their own bids; refusal of the companies to submit lower prices to the Public Health Service in the fall of 1956 when vaccine was in long supply; that Allied Laboratories and Parke, Davis knew what Lilly's price and discount to public authorities was before Lilly announced it; that different costs were incurred by the companies in producing the vaccine; and that several companies submitted bids to foreign public authorities below the prices bid in the U.S.

One of the key issues in the case came out early. Under the various vaccine contracts signed with the Public Health Service, a "most favored customer" clause assured PHS a lower price if the company sold vaccine below the contract price to some other public authority during the life of the contract. This, the companies argued, made it impossible to quote more than one price.

• **The Defense**—In a rousing, two-hour opening statement, Dewey blasted the government's whole case.

As Dewey put it, "the case is really very simple. Prices were the same. Was that because the officers of [these] companies . . . got together somehow and conspired, or was it because the harsh, tough competition of the business world brought about equal bids and the minute anybody lowered it, everybody else did? It is just that simple. That is the whole case."

Dewey said Lilly didn't make a practice of granting quantity discounts and had good reasons not to do so on vaccine sales, despite the pleas of state purchasing agents; that the "mystery" of Lilly's discount of 50% and 5% off list price for sales to public authorities is no more involved than that it was the standard practice on such sales by pharmaceutical companies; and that Lilly did indeed insist that its wholesalers "stick to its prices. . . . It is Lilly's policy. . . . We are proud of it . . . because we think that is fair to everybody, and the wholesaler is essential to us."

• **Clincher**—Dewey reached the climax of his argument on uniformity of prices. "They say all five defendants stood like a rock against any effort by any one of these zealous people [purchasing agents for state and federal governments] . . . to get them to cut the price. Do you know why? Because the United States government made them." The most favored customer clause, says Dewey, was "handed to us. Of course we had to sign it. We would have been pilloried if we hadn't." This is a basic position of the companies in the case.

• **Possible Penalties**—The stakes, however measured, are high. The prestige of the vaccine makers is vitally involved. And not only could each be fined up to $100,000 if found guilty; they would then very likely become the first objects of a 1956 law allowing the government to sue antitrust violators for damages.

Trustbusters Flay GM Again

Justice Dept. suit attacks 1953 acquisition of Euclid as tending to reduce rivalry in the off-highway earthmoving equipment industry. Meantime, grand jury probe continues.

General Motors Corp., already the target of a broad grand jury investigation of whether its bigness violates antitrust law, has been hit on a second monopoly count by the Dept. of Justice. This one attacks GM's 1953 acquisition of the Euclid Road Machinery Co., now its Euclid Div. The deal gave GM entree into the booming market for heavy earthmoving equipment.

The suit, filed in federal court in New York last week, charges that GM, by acquiring Euclid, violated the Clayton Act provisions banning acquisitions or mergers that "may substantially lessen competition or tend to create a monopoly."

• **Interpretations**—Filing of the charge suggests that GM, the world's biggest manufacturer, is rapidly becoming the biggest antitrust target as well. The case raises the question of whether any entrance of a giant such as GM into a new line of business via merger is inherently illegal under the Clayton Act. Certainly, the suit means antitrusters will assail GM for any such deal.

In addition, the action underscores the government's determination to control the structure of U.S. business with the antitrust laws. It closely follows blocking of a merger of Texaco with Superior Oil (BW—Oct.3'59,p34) and of the Union & New Haven Trust Co. with the First New Haven National Bank in Connecticut (page 60).

• **New Approach?**—The new case also suggests that the antitrusters may have lost some of their zeal about splitting up GM in a single big suit—such as might conceivably result from the pending grand jury probe. The grand jury was set up to make a broad study of GM, possibly aimed at taking action against GM's over-all power, particularly in autos.

The jury is just barely beginning to hear evidence. The original subpoena issued to obtain company records was quashed last July as "unreasonably" broad in scope. A new subpoena, described as "more limited," has been served, and GM officials this week began replying to it.

There's no connection between the GM-Euclid suit and the grand jury investigation. But the Euclid case suggests the trustbusters might try a series of suits, each aimed at a particular aspect of GM operations, rather than one all-inclusive prosecution. Back in 1956, they attacked GM's 89% share of bus manufacturing under the Sherman Act (BW—Jul.14'56,p25). This suit is still pending. Now comes the Euclid action.

Whether the government continues taking little bites or starts taking big ones, though, it seems safe to predict GM faces still more antitrust prosecution.

• **Euclid Charges**—In the Euclid merger case, the Justice Dept. makes these specific charges:

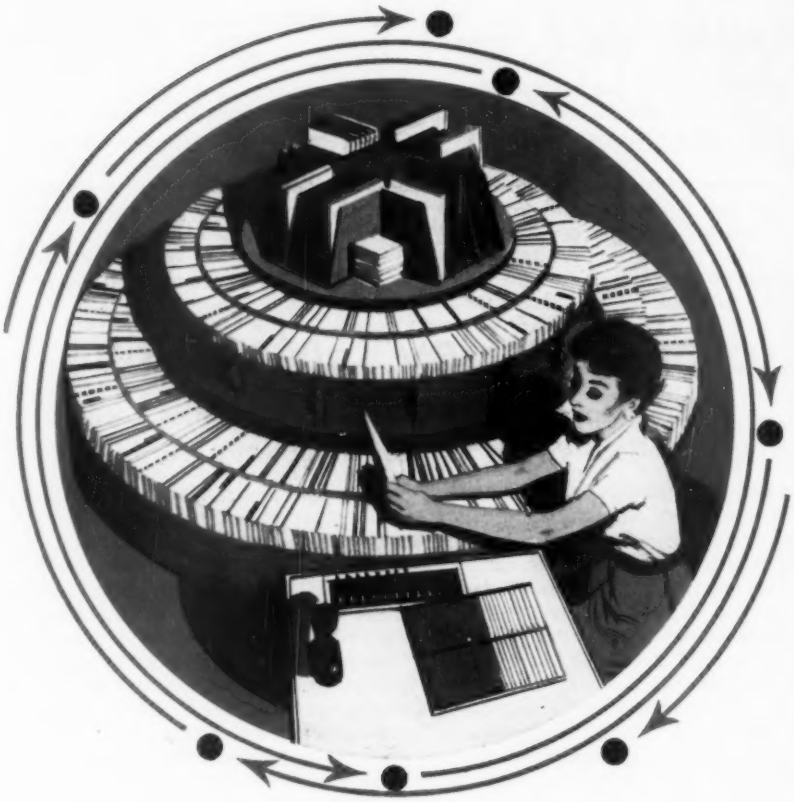
• The deal may substantially lessen competition or tend to create a monopoly in the $1-billion-a-year off-highway earthmoving equipment industry.

• Potential competition between GM and Euclid has been eliminated.

• Competition in the manufacture of components, particularly diesel engines and transmissions, may be markedly reduced.

• The acquisition gives GM an edge over smaller producers and may foster other mergers—which would further decrease competition.

To support these charges, the government can borrow from its smashing victory in blocking the Bethlehem-Youngstown merger last year. But there's a big difference in the cases. Bethlehem and Youngstown were primarily engaged in the same business, steelmaking. But GM and Euclid were not in competition in 1953. GM was an important supplier of diesel en-



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gines, but it did not make off-highway earthmoving gear. For several years before the merger, Euclid had produced more than 50% of all the off-highway dump trucks made in the U.S.

• **Surprise**—GM's first reaction to the suit was surprise. Chmn. Frederic Donner said the Euclid Div. "is not a large factor in the earthmoving equipment field and has accounted for about 5% of the business in this field."

His statement emphasizes one of the principal issues in the case. Off-highway earthmoving equipment includes a broad range of specialized products, and Euclid has not been dominant in all of them, either before or after the merger. In the total market, Euclid has stood fairly small. Despite its dominance in dump trucks, it did not make such important items as crawler tractors, graders, bulldozers, tractor-mounted shovels, and loaders, and many of the less important ones.

• **Government Evidence**—But the gist of the government charge is not that GM acquired an existing monopoly. Rather, the idea is that the deal gave GM entry into a new field that it can now build much bigger, possibly to the point of monopoly, through its vast financial resources. Justice cites earlier GM acquisitions—either of rivals or of well-established companies in lines new to it—that have played a major role in helping GM dominate in autos, trucks, buses, and diesel locomotives.

The Senate Antitrust & Monopoly Subcommittee, in a study of GM three years ago, called attention to the Euclid acquisition and made most of the same arguments the Justice Dept. has now advanced.

• **Mounting Sales**—As part of its evidence showing what has happened to Euclid since GM took over, the government points out that total sales have climbed from $33-million in 1952 to $100-million in 1956 and $90-million in 1957. Its share of dump truck sales rose from a little more than 50% in 1953 to about 80% last year.

The antitrust attorneys will hit hard on the effect of the merger on Euclid's purchases of diesel engines and transmissions. GM supplied only 25% of Euclid's diesel engines in 1953 and around 90% last year, the government says. And, it adds, Euclid purchases 10% of all diesel engines sold in the U.S. in the 100 to 600-hp. range. In addition, the Euclid line has been enlarged to include such equipment as crawler tractors and log haulers.

• **Goal**—In the long run, the government obviously wants the courts to order a splitup of GM and Euclid. The anti-merger law has been successfully used to block proposed mergers, as in Bethlehem-Youngstown, but never yet to achieve a splitup. **END**

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Write for more information on SUPER DYLAN high density polyethylene for bottles. Koppers Company, Inc., Plastics Division, Dept. BW-109, Pittsburgh 19, Pennsylvania.

Offices in Principal Cities · In Canada: Dominion Anilines and Chemicals Ltd., Toronto, Ontario.

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DYLENE® polystyrene, DYLITE® expandable polystyrene, and DYLAN® polyethylene are other fine plastics produced by Koppers Company, Inc.

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capable "COMPANION" for short run marking:

- **gives "big machine" imprint quality**
- **at a fraction of the cost**
- **with no production line delays**

You want your sample quantities and limited runs to have the same good, clear marking your production runs do — but often the only expedient is hand-stamping or interrupting production marking just for a small lot. This is exactly why Markem developed the little hand-fed, hand-operated "Companion" — as a *practical* combination of high quality imprinting and extremely low cost for short run marking.

Markem printing elements for the Companion include rubber plates, zinc etchings and slotted metal Masterplates with quick-change type inserts — to handle all sorts of marking requirements. You also have a choice of thousands of Markem specialty inks for these printing elements — air dry, baking or firing types . . . that "take" on everything from polyethylene to glass. The "Companion" itself costs $203.50. With your Companion, printing elements and inks, you can mark flat, curved or irregular shapes — either directly or by offset — with imprints up to 2" x 3". There's no extensive set-up, trial and error or special tricks of the trade — anyone can get good imprints with a Companion, *anywhere* in the plant.

In the meantime, your *production* run marking keeps right on — and this is where other, more specialized Markem machines can also help you. Some have automatic feed and ejection, others are designed to be built into your line or packaging equipment. There are now about 40 basic *groups* of these direct, offset and screen process marking machines, used for marking everything from baseball gloves to transistors.

Find out how you can make *your* marking more profitable, with a "Companion" or some other combination of Markem machine, type and ink. Write Markem Machine Co., Keene 33, New Hampshire.

MARKEM

EVERYTHING INDUSTRY NEEDS . . . FOR PROFITABLE MARKING . . . SINCE 1911

THE MARKETS

Pros Make Killing in Auto Stock

● **Studebaker-Packard shares have risen for all to benefit, but the experts made much more than that.**

● **Their skill at arbitrage and their willingness to gamble brought huge gains from a company that only a year ago was close to the wall.**

● **The key to their maneuvers lay in the company's arrangements with its creditors.**

The sharp rise in the price of Studebaker-Packard common stock has meant real profits for those who bought at or near the bottom last year. This week, sparked by a third-quarter report showing earnings in the black for the fourth consecutive quarter, S-P common was bid up to over $21 a share. It led all other issues in trading volume.

But the rise in the common stock, which was available to anyone, doesn't represent all the profits in S-P shares. A group of Wall Street investment bankers, and some shrewd and sophisticated professional operators, shared in even bigger gains. Through their knowhow in arbitrage, the advantage of low margin requirements and their willingness to take a gamble, they were able to make some huge profits. They did this by buying and selling S-P's convertible preferred stock and "when issued" common.

• **Quick Killing**—Most of the men involved in these deals are naturally reticent about their operations. But a number of groups, participating in either separate or connected deals, admit they did well.

One insurance company, Metropolitan Life, was able to turn a probable loss on a loan to S-P into a $4-million profit; a European investment firm made close to $1-million in a matter of months; a group of arbitrageurs showed a 100% profit on a $1.2-million investment in just four days, and one New York Stock Exchange member is reported to have a $4-million profit. Meanwhile, A. M. Sonnabend, S-P director, has a paper profit of well over $1.5-million.

• **Out Of Its Jam**—These big winnings, as well as the rise in the common from below $3 in 1958 to $21 this week, were made possible by the impressive performance of Studebaker-Packard itself. Just a year ago, the company was close to the wall. But with the help of a group of 23 creditors—20 banks and three insurance companies—S-P was able to come out with its compact car, the Lark. The Lark's success sparked the initial rise in the price of S-P's common—though whether so spectacular a rise is justified by earnings alone is considered questionable by conservative analysts.

The enormous profits of the professionals, resulted fundamentally from the rise in the common. But they were able to take special advantage of a peculiar situation arising out of a deal S-P had made with its creditors. S-P owed these creditors $54.7-million, and couldn't meet its payments. Both S-P and the creditors now say that if a refinancing plan had not been worked out, S-P would have been liquidated.

• **Salvation Deal**—The agreement was thrashed out in a series of meetings among a special committee, headed by Frank J. Manheim, an S-P director and partner of Wall Street's Lehman Bros.; the three insurance companies, and a three-man group, chaired by Henry J. MacTavish of the Chase Manhattan Bank, representing the 20 banks.

Under this deal, the creditors agreed to cancel the old loan. They got $16.5-million in 5% secured notes, which were senior obligations; in addition, they got 165,000 shares of convertible preferred stock at $100 a share. Each share was convertible on Jan. 1, 1961, into 33⅓ common shares—or a total of 5.5-million shares. According to one banker in the deal, "We had our arm twisted before we accepted, but there was nothing else we could do."

The creditors figured the refinancing gave them about 60¢ for every dollar they had lent to S-P. If the common stock went above $3, though, their convertible shares would also rise in value. But, as part of the deal, the creditors agreed that they would not sell their stock except to bona fide investors. For its part, S-P agreed that if any creditor wanted the convertible registered for sale and listed, it would approve.

• **On Their Own**—While the creditors acted as a united front in the refinancing negotiations, they were on their own as soon as they received their share of the notes and convertible stock. A number of Wall Street firms and individuals had kept close tabs on S-P's activities. They knew that some of the creditors would be willing to sell at a fair price. They knew that buying S-P was a gamble, but they figured that if the Lark proved to be a success, it could mean a big killing.

The first sale by a bank came about 10 months ago, when New York's Hanover Bank, which held 1,991 convertible preferred, sold out to Daniel J. Bernstein, a NYSE member (who also made a big killing in another auto stock, American Motors). The price was somewhere around $200 a share, which meant that Hanover got about twice the original price. This did not get Hanover out even on its loan, but it was close. (In order to break even, the creditors would have to get $233 for each share.)

Then other creditors began selling. The Mutual Benefit Life Insurance Co. sold a block of 15,082 shares to A. M. Sonnabend, who took 7,000, and to a group of Sonnabend's friends. The purchase price was $208. Sonnabend and his associates picked up another 1,593 from the Detroit Bank & Trust Co. at the same price.

• **Special Handling**—At least some of these sales were handled by Bear, Stearns & Co., a Wall Street firm that prides itself on its handling of special situations. It acted merely as a broker in the Sonnabend transactions, but it also bought shares from other creditors for its own account and for the accounts of a number of Wall Street special situation houses. The price of the preferred shares went up as the price of S-P common rose, and Bear, Stearns paid as high as $250 for some small blocks. In all, Bear, Stearns handled about 50,000 shares at an average price of $225.

Salim L. Lewis, senior partner of Bear, Stearns, said that he had "no great trouble" getting other firms to buy. But some turned him down, partly because they didn't want their money tied up in what they thought was a risky stock, partly because of the provision that they had to promise to hold on.

• **Lehman Interest**—During this period, Lehman Bros., which likes to put money in what it describes as "sound speculations or interesting investments," felt that S-P had possibilities. It had a long association with the company, had worked hard to keep it from going un-

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der. Like Bear, Stearns, it had acted as a broker, although in a much smaller way, in negotiating sales between the creditors and new investors.

Now, with prospects brighter, it considered an investment for its own account as well as for a few clients, including Daimler-Benz, the German car maker, which also had ties with S-P.

In July, after another series of negotiations, it purchased 43,004 shares at the "breakeven" figure of $233.33 a share, from five banks, including Chase Manhattan. This transaction was different from those that had gone before. In buying the shares from the five banks, Lehman was not acting as broker but as a direct investor, and it insists that it will hold for the long-run.

• **The Preferred**—Since the stock was unregistered, the Securities & Exchange Commission kept a close watch on every sale, insisting that brokers could deal only with "knowledgeable" and genuine investors, not speculators.

But with so much stock changing hands, one bank, which had not sold requested that S-P register and list the preferred, so that it could get a better idea of the going price. S-P had no choice anyway but it went along willingly.

Normally, only shares to be offered to the public are subject to registration. In this case, SEC decided that, with so many private sales taking place, the entire issue—165,000 shares—must be registered. Technically, however, someone had to make a public offering so that a registration could be made. In August, Bear, Stearns agreed to sell 550 of its shares. It got $310 a share (BW—Aug.22'59,p92).

• **"When Issued"**—The registration of the preferred meant that S-P had to list the 5.5-million "when issued" shares on the NYSE. This was in addition to S-P's 6-million regular common, already listed. But the "when issued" stock was traded separately, because the preferred is not convertible until January, 1961. With a share of the preferred priced at $310 and convertible into 33⅓ shares of common in 1961, each "when issued" share was worth just under $10.

This gave purchasers of the preferred stock a perfect set-up for an operation designed to protect their profits. Those who had bought the convertible preferred from the banks at $208 to $225 a share were actually paying between $6 and $8 for the "when issued" common on a conversion basis. The "when issued" began trading at $10, so that holders of the preferred could sell short the "when issued" and count on using their preferred for the delivery in 1961.

• **"Against the Box"**—This form of transaction is called "selling against the box," which applies to cases where the short seller himself has the stock available for delivery. Most of the professionals who bought the S-P preferred are protecting their profits in this way. This is evident from the 2.4-million short position in S-P "when issued," almost half of the total "when issued" shares and one of the biggest short positions ever recorded in a single stock.

Some traders obviously engaged in a slightly different form of arbitrage. They sold short the regular common and bought the "when issued," planning to use it to cover after conversion. They took this step because the "when issued" was trading below the regular common, so that they could make money on the spread.

• **Price Spread**—This week, for instance, the "when issued" was selling at $14 and the regular was selling at $20. A trader could sell short the regular and cover it by buying the "when issued," which can be purchased on a 25% margin that applies to "when issued" shares. Thus, he can profit from the spread alone. On a 100-share deal, this could bring a gross profit of $500 in 1961.

The abnormal spread between S-P's regular common and the "when issued" is puzzling to a lot of Wall Street experts. There are a number of reasons that help explain the gap. Brokers, who work on commissions, are not pushing the "when issued," because commissions are not collectable until 1961; in fact, some brokers are refusing to buy "when issued" for their customers. Then, too, investors can't take their profits out of the "when issued," even if they sell before 1961.

Most important, the NYSE, fearing a squeeze on the shorts, moved to bar conventional arbitraging between regular and "when issued" common. It issued two rulings prohibiting any short selling of the common that is covered by purchase of the "when issued." Some people are getting around this by using separate accounts, although member firms have been warned to question any customers wanting to buy or sell short in S-P, and the NYSE has requested member firms to report all transactions in S-P's issues.

• **Paper Profits**—A lot of money was made, on paper, by investors who bought the preferred from the banks and sold the "when issued." Others have already taken cash profits by selling the preferred to other buyers. The price of the preferred at midweek was $450, which is almost double the average price paid for the stock. According to the estimate of one insider, those who bought through the Bear, Stearns operation, had profits of between $5-million and $7-million.

• **Met and Lehman**—But one big creditor, Metropolitan Life, which had 30,165 shares of the preferred, did not sell when the banks and other insurance companies unloaded. It saw a chance to come out ahead on its original loan. This September, after the convertible shares had been listed and were selling at over $360 a share, the Met got together with Lehman Bros.

Lehman tried to sell the shares, offering a $10 concession to dealers. But with such a huge block on the market and with each share priced high, the dealers wouldn't buy.

The deal seemed stymied until a Lehman man, Edward W. Schoenhof, suggested a secondary offering of "when issued" shares, rather than the preferred. This was a novel idea; according to Lehman and other underwriters, a secondary in "when issued" has been tried only once or twice before.

Lehman acted as a broker. It saw a new opportunity for arbitrage. Another sort of gap was developing: The "when issued" was selling at a premium in relation to the preferred. With a price spread prevailing between a share of the preferred and the 33⅓ common shares it represented, an arbitrageur could buy the preferred, sell short the "when issued," and pocket the difference.

• **The Syndicate**—Lehman and Glore, Forgan, who acted as joint brokers for the Met, got in touch with Gus Levy, of Goldman, Sachs & Co., who is considered Wall Street's top arbitraguer. Levy called in three other firms—Bear, Stearns, L. F. Rothschild, and E. H. Stern & Co.—which formed a syndicate with him.

The syndicate purchased the Met's preferred for close to $11-million, putting up only a 10% downpayment. This meant that they obtained the "when issued" created by the convertible preferred at a little over $11 per share. Lehman then arranged a secondary offering of the 1-million "when issued" shares.

At the time, the "when issued" was trading in the market at $12.75, and the syndicate sold 600,000 shares of its "when issued" at this price. However, Lewis of Bear, Stearns felt that the "when issued" price would rise still further, and he convinced the syndicate to hold back the other 400,000. When the price rose a few points, the syndicate sold the rest. All told, the four firms put up about $1.2-million, got a gross profit of about $1.4-million.

• **Good Investment**—Not all those who bought the preferred are selling—or protecting their profits. Lehman, for example, has a straight investment position. It feels that it has a lot of fat to ride on, and Manheim expresses himself as "hopeful" about S-P's future. Sonnabend is another who is holding on.

Most of the banks don't begrudge the profits that the purchasers of their stocks have made. As one summed up this week, "We weren't in it for profits. We are glad it turned out as well as it did for us." **END**

In the Markets

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Premature Stock Rally Collapses When Steel Negotiations Fail

The stock market, which moved up late last week on false hopes of an early steel settlement, fell back this week as it became clear that the union and the companies were still far apart. On Wednesday, the Dow-Jones industrial average was down to about 630, at the bottom edge of the narrow trading range in which stocks have drifted for the last three weeks.

Most brokers and analysts think the market may be in for a period of further drifting. Some think that there are plenty of opportunities for trading, and add that specific stocks will continue to attract attention.

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Favorite Stocks of the Investment Companies

Stock	12/31 1958 Rank*	6/30 1959 Rank*
IBM	1	1
U. S. Steel	2	2
Texaco	3	3
Goodyear	5	4
Standard Oil N. J.	4	5
du Pont	14	6
Int'l Paper	12	7
GM	13	8
Republic Steel	11	9
Bethlehem Steel	10	10
Gulf Oil	6	11
General Electric	16	12
Amer. Tel. & Tel.	7	13
Armco Steel	17	14
Royal Dutch	8	15

* Ranked in order of aggregate market value of holdings of 294 investment companies.

Data: Vickers Associates. ©BUSINESS WEEK

Cyclical Stocks Now in Favor With Investment Companies

There were sharp shifts in investment company policy during the first half of 1959. The table above shows the biggest holdings in their portfolios as of June 30. The stocks shown in color were the ones the funds bought most heavily in the preceding six months. According to Sidney G. Vickers, who compiles the "favorite 50" stocks of open and closed-end trusts, **portfolio managers poured funds into cyclical stocks,** including Ford (rank 19) Westinghouse (Rank 24), and Monsanto (Rank 32), which appear in the listing for the first time.

On the minus side, says Vickers, **there was selling in the oils,** which declined from 32.6% of the total value of investment company investments to 23.1%. But part of this decline, he cautions, was the result of declining market prices, rather than actual sales.

• • •

"Magic Fives" Stimulate Bond Prices; New York Banks Make Defensive Offer

This week, the bond market continued to react to the unprecedented public demand for the Treasury's "magic" 5% notes (BW—Oct.10'59,p151). Prices turned up all along the list, and there was a distinct easing of yields noticeable in the short-term money market. **Bond dealers, however, are not yet willing to predict that the trend in bond prices has turned up, or even that the market has hit bottom.** Too much will depend, they say, on over-all business conditions and the Federal Reserve's credit policy, after the steel strike.

Mutual savings banks in New York, which lost over $100-million in deposits as savers switched into the "magic 5s" from 3½% savings accounts, are taking steps to see the same thing doesn't happen again. **They offered to accept long-term bonds from the Treasury at yields well below current market rates.** They feel that this offer—which would take the form of a refinancing of 2½% and 2¾% bonds currently held by the banks—might dissuade the Treasury from attempting another high-rate public offering that would drain their deposits.

• • •

SEC Issues Warning to Underwriters On Practices It Calls Manipulative

The Securities & Exchange Commission fired a blast this week at practices common to many Wall Street underwriters. Warning that new regulations may be on the way, it cited a number of examples of what it said amounted to manipulation. For the most part, they had to do with low-priced initial offerings of shares in missile, electronic, or defense-related industries:

• **Allotment of a big part of an issue to over-the-counter dealers,** who begin to create a market by selling their shares at prices substantially over the offer price. At the same time as they are distributing their own allotments, SEC said, they are bidding for the stock in open market, trying to force prices up.

• **Reservation of 20% to 50% of a firm's share in an issue to "insiders"**—partners or officers in an underwriting house or their family and friends. In this way, the public is left to scramble for a limited supply of stock, and prices skyrocket.

• **Newspaper advertisements that say X-million shares of an offer are for sale to public when a large part of the offering is already reserved** for special customers.

• **Circulation of rumors that an issue is "heavily oversubscribed."** These statements are designed, says the agency, to lead the public to believe an issue is in short supply, when stock is actually being held back by the underwriters.

SPECIAL USS REPORT

THE RISKIEST BUSINESS IN THE WORLD

turn page for the story

Rotary bushing turns Kelly, which is threaded into top joint of drill pipe.

Tongs unthread drill pipe joints, just like a pair of pipe wrenches.

On the monkeyboard, derrickman reaches out to secure the pipe and stack it.

50 feet to go

the story of Buddy Branum's $23,000 fishing trip

It happened in Yoakum County, Texas, during the night tour of Rig No. 6 operated by Tri-Service Drilling Company. The hole was down 11,600 feet, just 50 feet away from pay (oil-bearing sand).

Down the rat hole. Drilling progress was slowing down, so the driller decided to change the bit. He tripped a hissing air clutch, stomped on the throttle, and the three, 475-horsepower engines started to coax the 134-ton, two-mile string of steel drill pipe out of the hole. The roughnecks clamped huge steel tongs above and below the joint, wrenched it open, then waited until the spinning rotary table unthreaded the joint. Then the square-shanked steel Kelly* joint and swivel were slid down into the rat hole until drilling resumed.

Belly-buster and geronimo. From then on, the pipe was pulled out in "stands" of three 30-foot lengths. The derrickman, from his precarious perch near the top of the derrick, leaned out over space against the "belly-buster," whipped a length of rope around the stand of pipe and manhandled it back into the steel fingers of the "monkeyboard." The ominous "geronimo" hung nearby. In case of fire or explosion, the derrickman hangs on to it and zooms down a long steel wire rope to safety.

Over and over the five men repeated the sweaty ballet that will always be one of the most romantic parts of oil drilling. They finally had 6,600 feet of drill pipe out of the hole and racked when . . .

One mile straight down. Suddenly, unbelievably, with a sharp "ping," a damaged joint broke. The crew watched helplessly as the mile-long, 80-ton string of pipe shot out of sight and screamed for one solid mile straight down until it speared into the bottom of the hole. The driller cut the throbbing engines and trudged across the drilling platform to the radiotelephone to call the boss, Buddy Branum, and break the news to him.

$2,000 a day. Few things are more disheartening to a drilling contractor than a costly fishing job. He gets paid so much a foot for drilling a well; and if he loses his bit or string of pipe he has to fish it back out on his own time, at his own expense. And the cost of running a rig is usually no less than $2,000 a day, fishing in a deep hole.

There are hundreds of kinds of fishing tools. If a thread exists, you try to screw onto it. Otherwise, you use a queer array of barbed tools to snag the pipe either inside or outside. Some of them are designed to hook onto the pipe and give it upward trip-hammer blows to jar the string loose. On Rig No. 6, they worked all day, two thousand dollars worth, and recovered only five joints of pipe. Next day, two thousand dollars later, they recovered 118 joints of pipe that were so crooked (due to the impact of the fall) that it had to be scrapped. The bit had shattered into a dozen pieces, and had to be fished out with a junk basket. Total cost of Buddy Branum's fishing trip: $23,000. A dead loss.

Who's Buddy Branum? His story began in Eunice, New Mexico, in 1937. Buddy Branum had just turned 21 and he got a job as a roughneck on a small rig. In a good week he made fifty dollars. He entered the Air Force in 1941, and got out four years later with $1,500. He spent it all on a small, two-man cable-tool drilling rig and, after two years of hard work, took all he could save plus all he could borrow for a down payment on the best rotary rig he could find—made by Oil Well Supply Division of United States Steel.

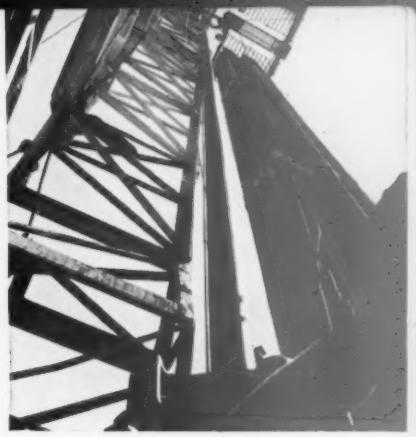
Make a buck, lose a buck. The first year, he made $40,000 drilling wells on a contract basis for oil companies. The next year, he *lost* $48,000. He was practically broke but he had the contracts to get back on his feet if he could just find casing to drill three new wells. This was in 1948, when casing was in critically short supply.

Nightmare hunt. The local United States Steel men knew Buddy and tried to help. They scoured the pipe mills of USS National Tube, where this premium-quality steel pipe is made. They telegraphed and telephoned every

**Named after baseball player Michael J. (King) Kelly, who became famous for his long slides while playing for Chicago from 1880 to 1887. Crowds used to roar, "Slide, Kelly, slide!" Formerly called the grief stem, the Kelly has flat sides, is gripped by the rotary drive bushing to rotate the drill pipe string. The Kelly slides downward as drilling progresses.*

Roughnecks set the slips to support pipe string while unthreading joint.

Worn bit coming out of hole. "Round trip" takes three to eight hours.



Looking upward. Drill pipe is stacked in "monkeyboard" fingers. Notice derrickman.

storage depot and Oil Well Supply store within 1,500 miles and they found the pipe. Branum drilled the wells and made money. In 1951, he bought another "Oilwell" rig, and he has bought more since. Today, Buddy Branum's Tri-Service Drilling Company operates four rigs 'round the clock and employs 74 people. Replacement value of the rigs is over $2 million, which is a lot to show for a man who lived on the edge of bankruptcy for half of his working life.

Risky business. The entire petroleum industry is made up of men who are willing to gamble their own hard-earned dollars on the chance of making a profit. They work against incredible odds: even in likely oil-producing territories, there is only one chance in four that the hole they drill will hit oil. Even if it *does*, there is only a 50-50 chance that the well will produce enough to pay off in the long run. In other words, they have to drill *eight* wells, at a typical cost of $200,000 each, to get one that will pay off all the dry holes!

Secret to survival. When you consider the fantastic odds against finding a producing well, and the rising cost of wages and raw materials, it's a wonder that the whole petroleum industry hasn't gone broke. They haven't, because of one almost unbelievable fact: *it costs less to drill a foot of hole now than it did a hundred years ago.* It cost less to drill a foot of hole in 1957 than it did in 1948. Why? Research had a lot to do with it. Faster drilling rigs cut drilling time. You can drill with fewer breakdowns because of stronger steels in the drill pipe. Casing lasts longer. All the equipment is better, especially the steels.

USS in the act: United States Steel is up to its ears in every phase of the petroleum business. Many divisions are literally famous for the intensive research they have conducted into the problems of petroleum men. The end result has been a vast array of equipment that reduces costs and makes it possible to drill ever-deeper wells with a minimum of trouble. *Oil Well Supply Division* manufactures many of the specialized pieces of machinery peculiar to this industry; such as drilling rigs and all major accessories including up-to-*1000*-horsepower pumps, complete derricks that jacknife down and disassemble for moving by truck, pumping units and engines and gas compressors. Oil Well Supply stores throughout the oil country sell and service this equipment. *National Tube Division* manufactures every tubular product for petroleum use, from the drill pipe, casing and tubing, to 36″ line pipe as well as 24 different analyses of alloy and stainless seamless tubing for corrosive refinery use. *American Steel & Wire Division* supplies world-famous Tiger Brand wire rope for all applications, and it has set startling records for ton-mile performance. *American Bridge Division* makes everything from barges to offshore rigs to mammoth pressure vessels. *Universal Atlas Cement Division* protects refinery equipment against corrosion and heat with Lumnite cement and supplies Unaflo cement to set finished casing in the well. United States Steel operates the country's largest steel research laboratory, and has developed a constant stream of high-strength, alloy and stainless steels to strengthen structural components and reduce their weight, improve the performance of drilling tools, and protect vital parts against corrosion.

This year is the 100th anniversary of the drilling of the first oil well. When we think of all that has been accomplished since 1859, we have to use an unavoidably pompous word and say that United States Steel is *proud* of its association with the great and growing petroleum industry.

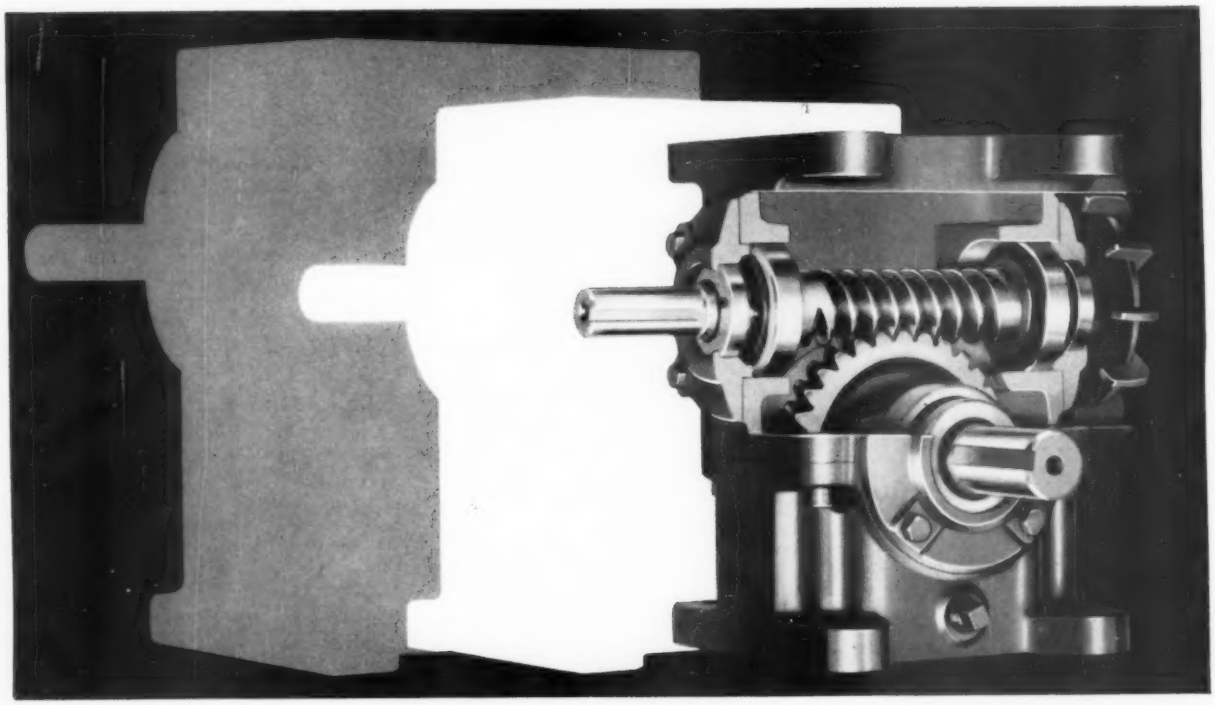
USS TRADEMARK **United States Steel**

Running pipe back in hole. Pipe is threaded together with power-operated chain.

Drilling rig in background, producing well in foreground.

Based on performance, Morse Eberhardt-Denver Speed Reducers give you:

MORE CAPACITY FOR YOUR MONEY



These curves compare a 5 inch center distance poweRgear with a 5 inch center conventional non-fan cooled heavy duty unit. Because of its fan-cooled design and extra-heavy construction, a Morse E-D poweRgear Speed Reducer easily exceeds "standard" ratings . . . delivers more horsepower per dollar!

Fan and fin cooling, extra-heavy-duty construction let poweRgear® do *more* work in a given size; you save space and weight, often trim initial costs

You get *more* than "rule-of-thumb" ratings call for, when you specify stock Morse Eberhardt-Denver poweRgear Speed Reducers. You pick and pay for the capacity you *need* . . . get it, as set realistically by exhaustive laboratory tests and critical on-the-job ratings.

Fan-and-fin cooling holds operating temperature down, sends rated life up on a poweRgear reducer. Its universal design permits mounting in bottom, top or vertical positions and includes extra-heavy housing, shafts and bearings. Result: you can specify a smaller, lighter, more compact unit to do your job . . . get *more* capacity for every reducer dollar.

There's a Morse E-D poweRgear reducer for *every* job: fractional to 40 H.P.; ratios from 5:1 to 3600:1; center distances from 2" to 7". Other Morse E-D speed reducers: conveyor drives; miter boxes; helical reducers; gear motors; worm and gear sets.

FOR MORE FACTS, call your Morse distributor today (see the Yellow Pages under "Power Transmission.") Or write: Morse Chain Company, Dept.3-109, Ithaca, N. Y. Export Sales: Borg-Warner Intl., Chicago 3, Ill. In Canada: Morse Chain of Canada, Ltd., Simcoe, Ont.

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PERSONAL BUSINESS

BUSINESS WEEK

OCT. 24, 1959

A new study released by the Society of Actuaries (life insurance) contains some startling statistics for people who are overweight and/or who have high blood pressure. Here are a few figures:

- **The death rate is 10% higher among men who weigh 20 lb. above average than among those of average weight.**
- **It's 25% higher among men who are 25 lb. overweight.**
- **And it shoots up to between 50% and 75% among men who tip the scales at 50 lb. higher than the average.**

The survey covers several million case histories, and claims to be the biggest of its kind in the health field. It's significant enough to alter the standard tables of average weights calculated 30 years ago and still used in doctors' offices. (Generally, men are heavier and women are lighter.)

According to the study, the average weights of short and medium-height men in the 20-to-30-year-old group are 5 lb. higher than 30 years ago. The increases in average weights for the 40-plus group—and also for tall men—generally are under 5 lb. Women in their twenties average at least 5 lb. less than 30 years ago, and women of all ages weigh less.

Men start putting on weight in their twenties and tend to level off in their forties; but women stay slim through their mid-thirties.

The survey also shows that among obese people, **diabetes, certain digestive ailments (such as gall bladder disease), and heart disease take a greater toll than among people of normal weight.** Heart death figures rise "sharply" with increases in weight.

On the brighter side, the study shows that overweight people who reduce—and stay that way—get dividends of extra years. The implication, of course, is that a span of being too fat isn't necessarily life-shortening. But don't count on this, say the medical specialists.

The lowest death rates at ages over 30 (for both men and women) are found among people who are 15 to 20 lb. below average weight. Note: Teenagers are an exception, with "some advantage" in extra pounds.

Average Weights in New Study Compared With Current Standard Used by Physicians for Men

	Ages 30-39			Ages 40-49			Ages 50-59			Ages 60-69		
	New Study	Old Std.	Change	New Study	Old Std.	Change	New Study	Old Std.	Change	New Study	Old Std.	Change
5′ 0″	131	128	3	134	133	1	136	135	1	133	136	—3
5′ 2″	137	132	5	140	137	3	142	139	3	139	140	—1
5′ 4″	145	138	7	148	143	5	149	145	4	146	146	0
5′ 6″	153	146	7	156	151	5	157	153	4	154	154	0
5′ 8″	161	155	6	165	160	5	166	163	3	163	164	—1
5′10″	170	165	5	174	170	4	175	173	2	173	174	—1
6′ 0″	179	176	3	183	182	1	185	184	1	183	185	—2
6′ 2″	188	189	—1	192	195	—3	194	198	—4	193	199	—6
6′ 4″	199	201	—2	203	209	—6	205	212	—7	204	213	—9

Hypertension (high blood pressure) is spotlighted, too.

The study, covering nearly 4-million blood pressure case histories, shows that even a small rise above normal may signal danger.

Also note this: Among men, systolic (high) readings of about 150 mm., or diastolic (low) readings of about 100 mm. are related statistically to a death rate of close to twice that of groups that have normal readings.

And there's a parallel to weight: The lowest death rate (for both men and women) is among those with "below average" blood pressures.

If you are both overweight and hypertensive, you may want to check with your doctor to plan a course of action. The study shows that where the two conditions occur together, the rise in death rate is "much greater."

But keep in mind that these generalities are statistical. Frequently there are individual exceptions.

—•—

Thinking about investing in bonds? You may have noted that yields are at 38-year peaks—nearly 5% on U. S. governments, 6% and more on some corporate bonds, and as much as 5%, free of federal income taxes, on some state and municipal bonds.

Usually, you place orders through your broker, bond dealer, or bank. Here are a few pointers to keep in mind about prices and commissions:

• **State and municipal bonds trade on a "net basis"—the asked price quoted by dealers for "round lots" of 10 bonds ($10,000 par value). But, you'll probably do better if your bank or broker locates "odd lots" held by dealers.** Since most professional investors and dealers don't like to trade in these, they're usually offered at lower prices—which means higher yields.

• **For U. S. bonds,** the "net basis" trading is for "round lots" ranging from 25 to 100 bonds ($25,000 to $100,000 par value). Buying as few as $5,000 worth may cost you as much as $2.50 extra a bond, or at the $10,000 level, an extra $1.25. **And your bank or broker may add a service commission of 62½¢ a bond. If you want U. S. Treasury bills—now returning up to 4½%—you can bid at the weekly auction through your bank.** Bids up to $200,000 on the 3-month bills, or $100,000 on 6-month bills, are allotted in full at the auction's average yield.

• **"Round lots" for corporate bonds usually total 10 bonds.** You can buy these at the "net price" from a dealer, but if they're bought through the New York Stock Exchange, you'll pay $2.50 commission per bond.

—•—

New look in savings bank accounts? Watch for the possible development in savings banks of fixed-term accounts with higher interest rates.

One sign: New York State's Banking Dept. is studying a plan to boost payments through issuance by savings banks of five-year certificates. You would have to hold them to maturity to qualify for a higher, unspecified rate than that paid on savings deposits. **Another possibility—setting up a special type of deposit drawing a higher rate, under which you would give 90 days' notice before withdrawing your account.**

—•—

Air fares—up and down: You can expect a 5% increase in first-class rates on international routes between North and South America next year as an aftermath of International Air Transport Assn. sessions at Honolulu.

Meanwhile, TWA has announced off-season (until Mar. 31) family reduction fares in all classes for flight to Europe, including those via jets, beginning Nov. 23. As head of the family, you pay one full fare and reduced fares for your wife and children 12 to 16. For example, reductions on de luxe or first-class flights would be $150 one-way, $300 round trip. Children under 12 pay half the adult fare.

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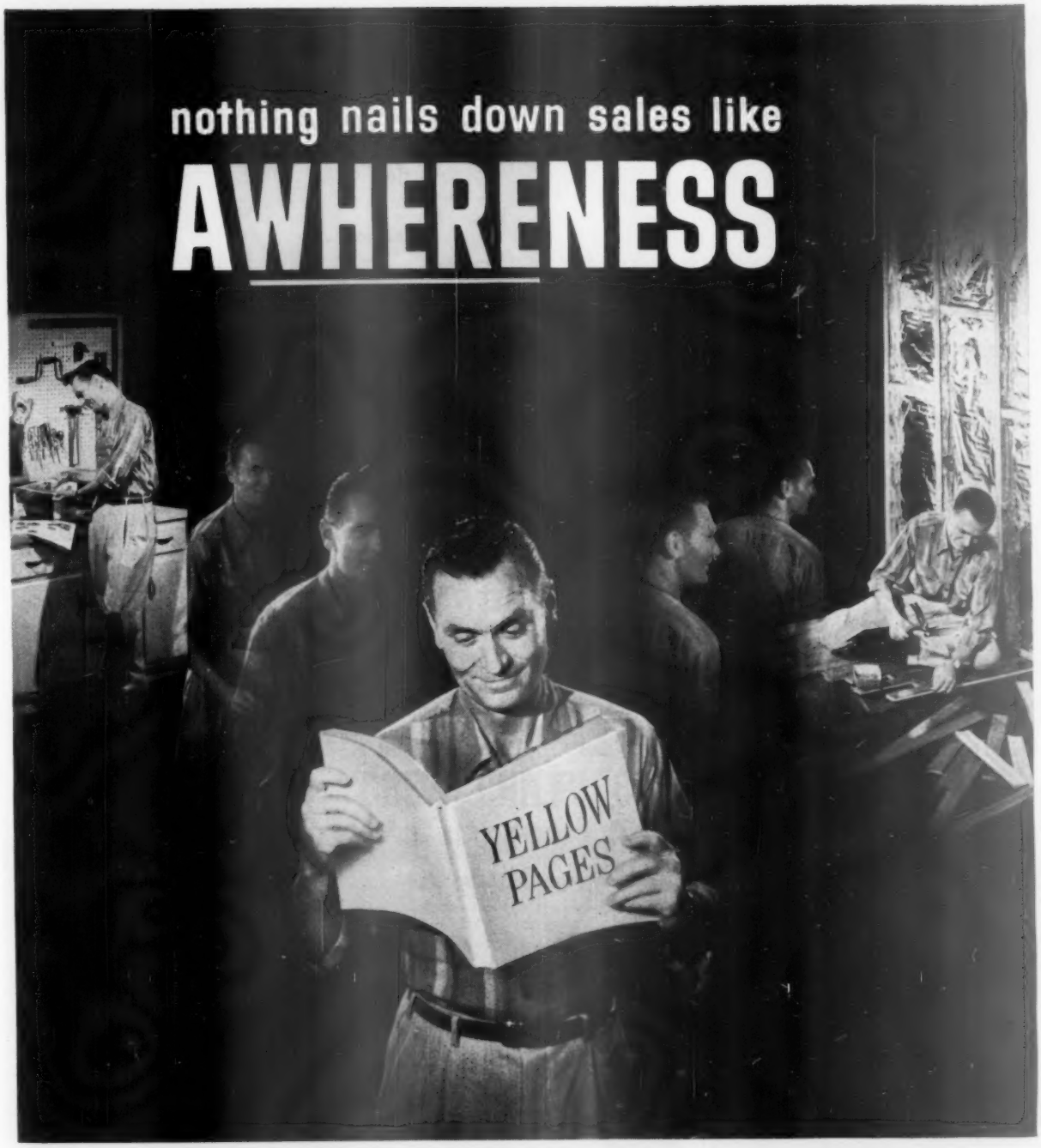

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From Hardware to Lumber, whatever you sell, you'll sell *more* when AWHERENESS of your product or service directs prospects to your local outlets—through the Yellow Pages.

For the manufacturer of national brand-name products, Trade-Mark Service in the Yellow Pages tells prospects where they can find his local outlets. For the local businessman, Yellow Pages advertising makes the community aware of the products and services he offers.

Remember, nothing builds AWHERENESS for your business like the Yellow Pages—the shopping guide used by 9 out of 10 shoppers.

Let the Yellow Pages man help you plan an AWHERENESS program for your business. Call your local Bell telephone business office today.

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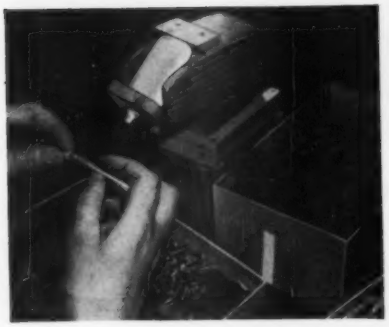
No. 6 of a series



Eastman 910 Adhesive solves another production bottleneck

The Waterman-Bic Pen Corp., of Seymour, Conn., manufacturer of fine writing instruments, introduced recently the Jewel-Point, a high ink capacity, synthetic sapphire ball-point pen.

In designing the pen, Waterman-Bic investigated adhesives as a faster, more economical way of joining the metal nose cone to the plastic barrel.

After extensive testing, their engineers found quick-setting high-strength Eastman 910 Adhesive to be the answer, eliminating more costly threading.

In production, a drop of adhesive is placed on the end of the plastic barrel. The barrel is inserted into the brass nose cone. A quick twist to spread the adhesive...*and the bond is formed.*

Eastman 910 Adhesive is making possible faster, more economical assembly-line operations and new design approaches for many products. It is ideal where extreme speed of setting is important, or where design requirements involve joining small surfaces, complex mechanical fasteners or heat-sensitive elements.

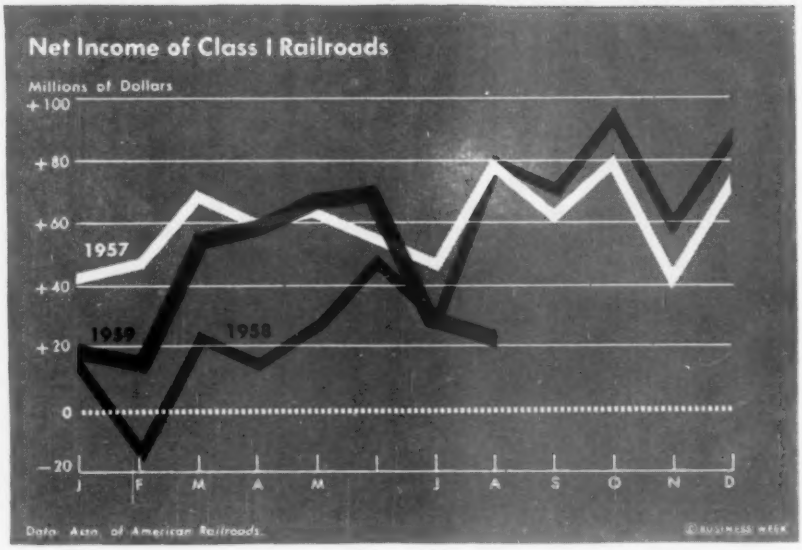
Eastman 910 Adhesive is simple to use. No mixing, heat or pressure is required. Upon spreading into a thin film between two surfaces, setting begins immediately. With most materials, strong bonds are made in minutes.

What production or design problem can this unique adhesive solve for you?

Bonds Almost Instantly ...Without Heat, Pressure or Catalyst

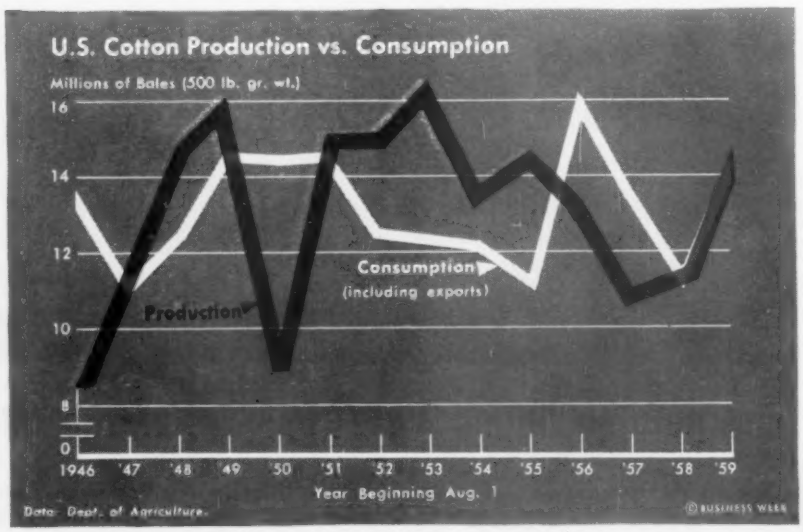
For a trial quantity (⅓-oz.) send five dollars to Armstrong Cork Co., Industrial Adhesives Div., 9110 Indian Road, Lancaster, Pa., or to Eastman Chemical Products, Inc., Chemicals Div., Dept. B-10, Kingsport, Tenn. (Not for drug use)

CHARTS OF THE WEEK



Strike Hits Rail Earnings

The continuation of the steel strike has had a marked effect on railroad earnings which had been recovering nicely through June. Net income of Class I carriers shrank to $32-million in July and $26-million in August as carloadings of coal, ore, and finished and semi-finished steel slowed to a trickle. Hardest-hit were the Eastern District railroads which reported a net deficit of $200,000 in July and $5-million in August.



Moving Toward Equilibrium

At a time when agricultural surpluses are mounting at an alarming rate, cotton strikes an encouraging note: Agriculture Dept. forecasters estimate cotton consumption—14.5-million bales, including exports—will nearly equal new production—14.7-million bales—in the 1959-60 marketing year, which began Aug. 1, despite the biggest cotton crop since 1953. While this will not cut

NEWS FOR TAXPAYERS

NEW ELECTRONIC "CREW CHIEF" CHECKS OUT CONTROL SYSTEM OF WORLD'S FASTEST BOMBER IN MINUTES

Using the ingenious Bendix computer-on-wheels, pictured at right, the Convair B-58, world's fastest bomber, now has its complex "power thinking" control system checked out in minutes.

The Air Force B-58 is the first bomber which would be impractical for man to fly without the aid of automatic control devices. This aid is supplied by the revolutionary new Bendix Control System that "thinks with" the pilot. Actually, the plane could no more fly tactical missions without this control than it could take off without engines. In fact, it literally thinks ahead of the human pilot, preventing him from putting the plane into any maneuver that, at the B-58's fantastic speed, could instantly destroy it.

The new Bendix Mobile Test Set is a trailer-mounted special-purpose computer which makes 750 dynamic and static tests on the plane's "power thinking" system in only 90 minutes. Previously, two days were required by three men to make just spot, static checks.

This unique Tester is the latest in a family of Bendix simulators and testers. In use also is "TATTE" (Talos Tactical Test Equipment). These devices check the Navy's Bendix-built Talos antiaircraft missiles before firing from Navy cruisers where Talos constitutes the principal armament. Other Bendix Missile Flight Simulators are saving years of time and millions of tax dollars by "flying" hundreds of missiles in the laboratory, thus eliminating many costly actual flight tests.

This new Bendix Mobile Computer-Tester rolls right up to the flight line. In minutes it checks out the "brain" of the Bendix Flight Control System on the B-58 Hustler.

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NOW—Six noted economists analyze the outlook for the '60s

Just Published

NEW FORCES in AMERICAN BUSINESS

An Analysis of the Economic Outlook for the '60s

By Dexter M. Keezer, *Director, and* William H. Chartener, Douglas Greenwald, Robert P. Ulin, E. Russell Eggers *and* Margaret K. Matulis *of the McGraw-Hill Economics Department*

278 pages, 5⅜ x 8, 23 illustrations, $4.75

Here's what to expect for U. S. business during the next ten years, told in down-to-earth language by practical economists. This book is filled with specific predictions on such subjects as business investment, industrial research, demand for consumer goods, new trends in marketing, the future of small business, effects of farm-price supports, and international trade.

NEW FORCES IN AMERICAN BUSINESS spotlights the powerful new elements at work in the American economy—and what they will mean to you in the next decade. All of its conclusions are based on solid research and annotated evidence. Included are 23 helpful charts illustrating key points. Read this authoritative book and start planning for *your* share of America's future prosperity!

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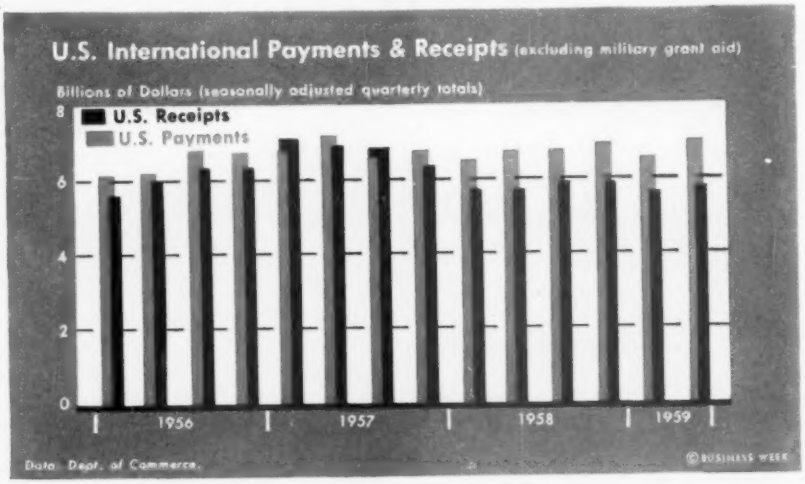
into surplus (8.9-million bales, mostly government owned, on hand Aug. 1), it will avoid appreciable additions.

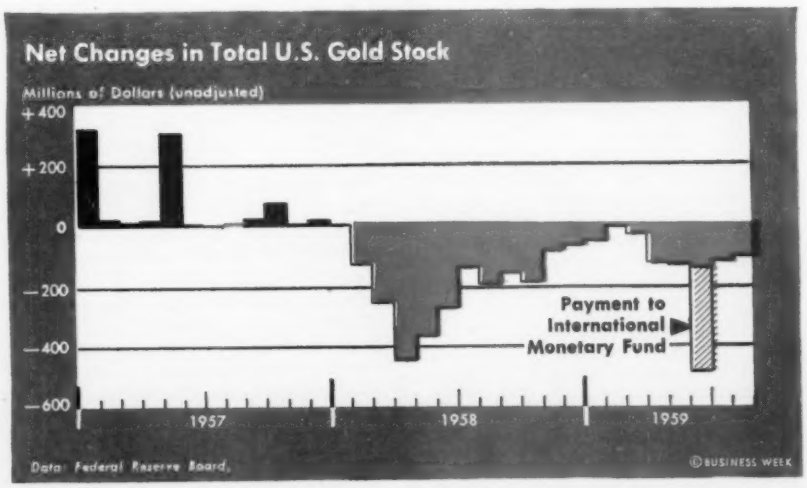
Cotton exports in 1959-60 are expected to nearly double the 1958-59 shipments.



Drain on U.S. Continues

During the second quarter of 1959, Americans and their government kept on spending and giving away more money abroad than they were receiving. The results: a continuing deficit in the balance of international payments which has generated considerable discussion in international monetary circles (BW –Sep.26'59,p184), and further depletion of U.S. gold stock (see chart below).

Almost $400-million of the $485-million increase in U.S. payments was for merchandise imports which hit an all-time high, $3.9-billion, in the second quarter.



Outflow of Gold Slows

Continuing an uninterrupted 19-month trend, the U.S. gold supply dwindled by $101.8-million more in August.

However, the depletion of gold in the U.S. monetary stock has been less rapid in the first eight months of 1959. Reductions from January through August totaled $1.1-billion, almost 27% below the $1.5-billion outflow in the same period last year. Had it not been for the $343.8-million increase in the U.S. gold subscription to the International Monetary Fund in June, the eight months' outflow would have been less than half of last year's.

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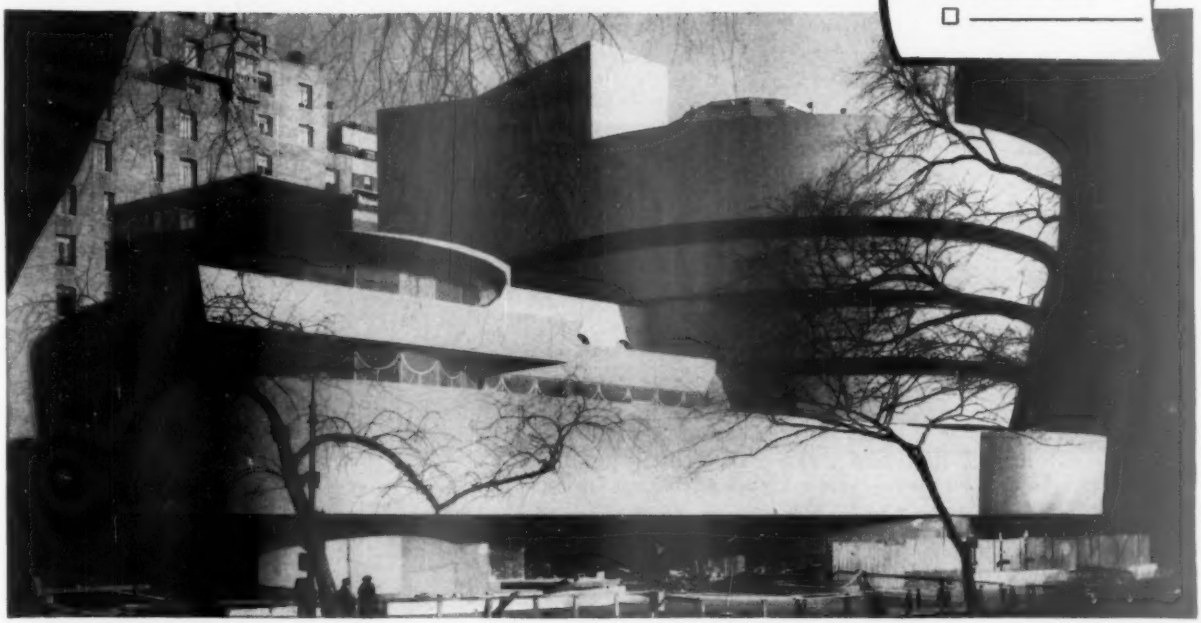

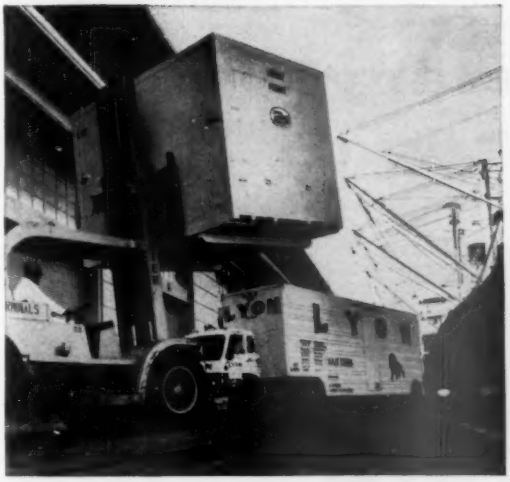

Over seas with safety-plus go home furnishings in huge fir plywood "Sea Pak" containers developed by Lyon Van Lines, world-wide movers. Exterior fir plywood was chosen to replace aluminum after passing rigorous impact and weathering tests.

Curves create problems for concrete contractors—but fir plywood forms help provide the solution. Nowhere is this better demonstrated than on the new Solomon E. Guggenheim Museum, New York City, designed by Frank Lloyd Wright and built by the Euclid Contracting Corp. Job superintendent Charles Spero reports, "This job could not have been done without fir plywood concrete forms."

Light-weight protection for tractor and motor grader parts is afforded by these inexpensive fir plywood separator trays. Allis Chalmers Manufacturing Company currently uses about 12,000 in its Springfield, Ill. plant, and has used them for the past five years. They speed inventory and handling, protect parts in transit.

FOR MORE INFORMATION about fir plywood—its uses, properties and advantages—write

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Dear Sir:

Your secretary notices that the type is growing faint.

But there are letters to get out and no time to undertake the long, tiresome job of putting in the new ribbon and then getting to the washroom to scrub the ink off her hands.

So the letters come out looking like this.

Dear Sir:

If your secretary had a new Royal Standard, she could change ribbons in nine (9) seconds and never touch the ribbon because Royal has the Twin-Pak ribbon changer.

Makes sense to turn in those old slow-poke machines on advanced new Royals. Doesn't it?

New Secretary? NO–New Royal!

Three more very executive-minded facts: Royals bring more at trade-in time than any other typewriter. Royals spend less time in the repair shop than any other typewriter. Secretaries prefer Royal to any other typewriter. ROYAL® *standard*
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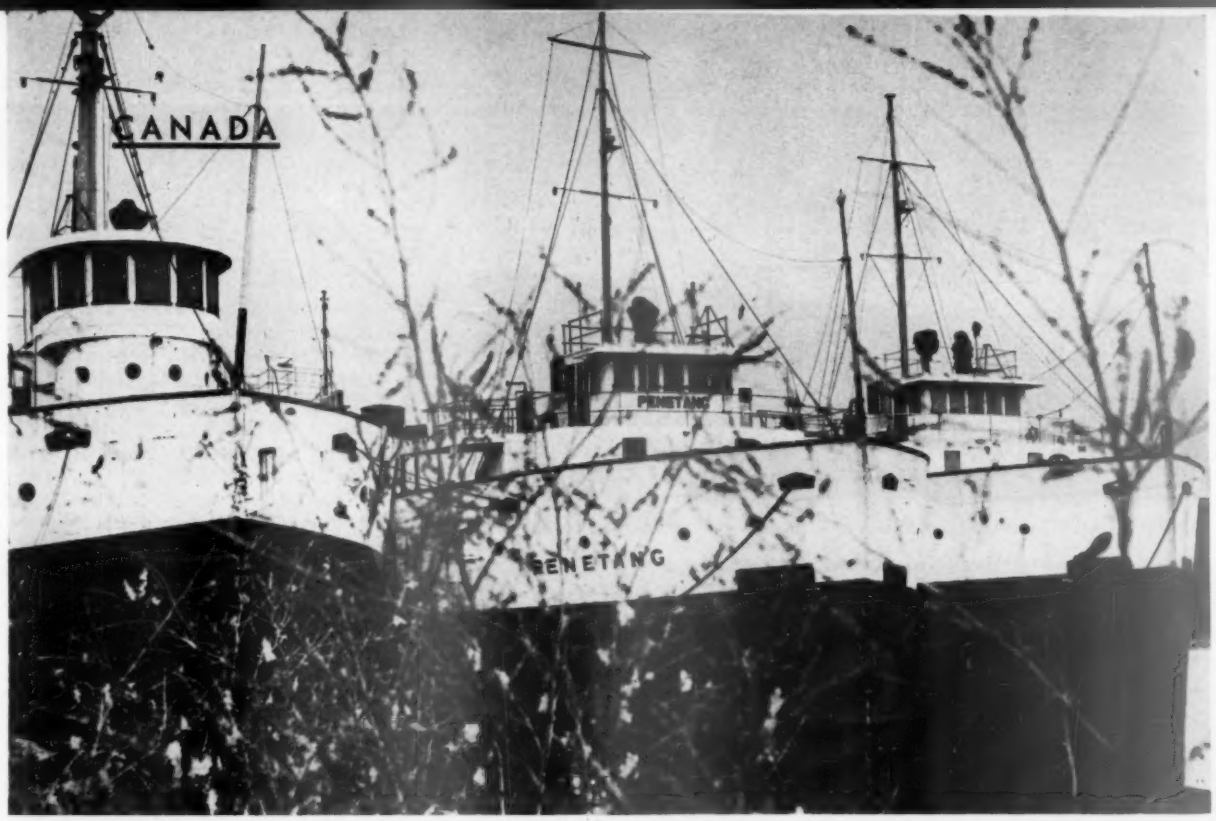
There are more Royal Typewriters in office use than any other kind.



OLD CANALLERS, operated between eastern end of Great Lakes and St. Lawrence ocean ports, have been idled by Seaway.

BIG BULK CARRIER, many times larger than canallers at right, now can navigate from lakes straight through to the sea.

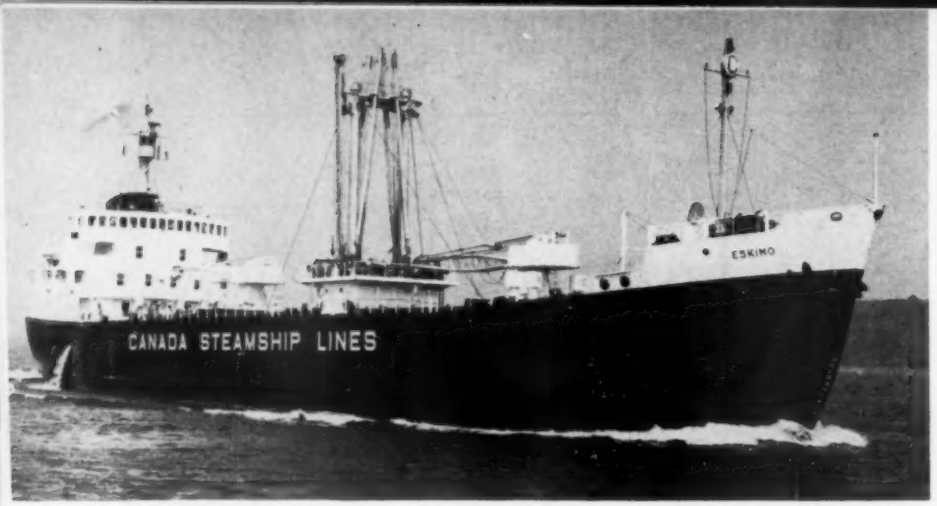
New Era in Lake Shipping

Look into any major Canadian port along the Great Lakes, and you will see more idle ships during the shipping season than at any time since the depression. At the same time, the volume of cargoes carried on the lakes is greater than ever: Freight moved in August of this year was 68% higher than in August, 1958.

The explanation is fairly simple: The St. Lawrence Seaway is changing the shape of lake shipping. It is grounding the old "canallers" and replacing them with much larger bulk carriers known as "floating shoeboxes" (pictures).

• **Smaller Fleet**—Before the Seaway opened last April, Canada's lake fleet numbered about 280 vessels, more than half of them 3,000-ton canallers. Today, this has been cut to about 180 ships, with the canaller the chief victim. By the mid-1960s, the number of active Canadian lake boats probably will drop to between 50 and 75. Most of these will be of one type—large bulk carriers in the 20,000-ton, 700-ft. class.

This is somewhat of a revolution in Canadian shipping history. Since the days of the sail, lake shippers have had to build two basic ship types in order



OCEAN-GOING carrier of medium size will take cargoes from Quebec City to British ports.

LAKE TANKER, one of the new canallers, is kept busy supplying oil to small lake ports.

to move cargoes from the Western head of the lakes to the sea. They used "upper lakers" (ranging in size from 7,000 tons to 22,000 tons) on the lakes, then transferred the cargoes to smaller feeder ships or canallers for the trip through the narrow, 14-ft. draught canal system built in colonial days to bypass the rapids in the St. Lawrence between Cornwall, Ont., and Montreal. The canallers are 240 ft. long and have a draught of between 10 ft. and 13. ft.

• **Through Passage**—The construction of the Seaway has broken this pattern. The river passage now is wider and has a 25-ft. draught. It can easily accommodate the 700-ft. bulk carriers, whose draught is about 23 ft., enabling them to make a through trip from the lakes to Montreal. Here, their cargoes are discharged into railroad cars for distribution to major manufacturing centers in central Canada or into the holds of ocean-going vessels.

The change hasn't come too soon. The increasing volume of lake bulk cargoes—mostly grain, iron ore, coal, and limestone—has made the transshipment of loads from bulk carriers to canallers more and more uneconomic. American lake shippers long ago abandoned the canallers as too small and inefficient for lake operations.

You get some idea of the considerable volume of bulk goods moved down the lakes by the Canadian boats from this figure: About 10% of the 110-million tons of cargo in U. S. and Canadian ships which passed through the Sault St. Marie locks in 1957 was carried in the bottoms of Canada Steamship Lines, Ltd. CSL is the largest of Canadian lake shippers, but it is only one of five major Canadian companies that haul cargoes on the lakes.

• **New Operation**—And you get some idea of the difference the Seaway has made to the shippers from this account by an executive of Upper Lakes Shipping, Ltd.:

"The small canaller of about 3,000 tons, which we had to build to get our cargoes out of the upper lake boats and down to the St. Lawrence ocean ports, can only carry about 90,000 bushels of grain per trip. Each canaller needed between 25 and 30 men to operate it. Our present 20,000-ton, 700-footers will hold as much as 800,000 bushels of grain per trip. In other words, we can move as much grain in one trip in a single ship as it previously required eight canallers to do. Moreover, we can operate the big bulk carriers with the same size crew as the old canallers. And we don't have the expensive transshipment delays any more. Sometimes it was more expensive to keep efficient stevedore gangs to transship the cargoes in a hurry than it was to operate the old canallers."

• **Scrap Heap**—Upper Lakes Shipping is scrapping 14 of its 17 canallers. By 1965, it expects to trim its present fleet of about 40 ships of assorted sizes down to about a dozen very big ships.

Another lake shipper, Scott Misener Steamships, Ltd., has laid up 22 canallers in a fleet of 33 ships.

Ultimately, the Canadians will not be very far behind the Americans in creating a fleet made up primarily of very large bulk carriers.

• **Heavier Loads**—The big lake boats already have their job cut out for them. The Seaway's deep draught passage now makes it feasible for both Canadian and American carriers to carry millions of tons of iron ore from Seven Islands on the north shore of Quebec in the Gulf of the St. Lawrence back up the lakes.

And it's also possible that soon more coal will be moving in Canadian carriers through the Seaway. Dominion Steel & Coal Corp., Canada's third largest steelmaker and producer of 55% of the Dominion's coal from remote coal pits in the Maritime provinces, is making a major bid for the bulk of Ontario's industrial coal demand. At present, almost all of Ontario's requirements of 20-million tons annually is met through imports from nearby Ohio. If Dosco succeeds, there will be an added pressure on the Canadians to move more of their own coal through the Seaway to mid-Canadian users.

• **Shippers' Dream**—Canadian shipping executives already are visualizing the ideal two-way cargo operation in the larger ships now that their transshipment worries are over: Payloads in both directions on the lakes and the Gulf of St. Lawrence, with big cargoes of wheat, coal, limestone, and iron ore going down the lakes, and iron ore from the Seven Islands and possibly Dosco's coal moving back up the lakes.

• **Small Survivors**—While the move into very big carriers and very long hauls will predominate on the lakes

Take Any Road You Like–
Eaton Springs Smooth Out the Bumps!

The spring suspension systems on today's motor cars and trucks have a two-fold job to do: they not only absorb road shock so that a trip on washboard roads seems as smooth as over the turnpike, but they also provide a resilient, yet firm and positive link between the road and the car body—a critical factor in steering and roadability.

As a pioneer in automotive spring research and production, Eaton has worked in close co-operation with leading car and truck manufacturers in developing chassis springs to a high degree of perfection. Today's scientifically designed leaf springs are an important factor in giving many motor cars their smooth-as-velvet ride and safe, easy handling on the road.

In addition to springs, Eaton also supplies many other components which contribute to the efficiency, dependability, safety, and long life of motor cars and trucks. Eaton not only furnishes parts and equipment to every American manufacturer of motor cars, trucks and engines, but also serves leading manufacturers in *every major industry*. Eaton research and production ingenuity help make the products of everyday life better than they otherwise would have been.

Let us tell you more about our company, its plants, and its products; write for our new booklet.

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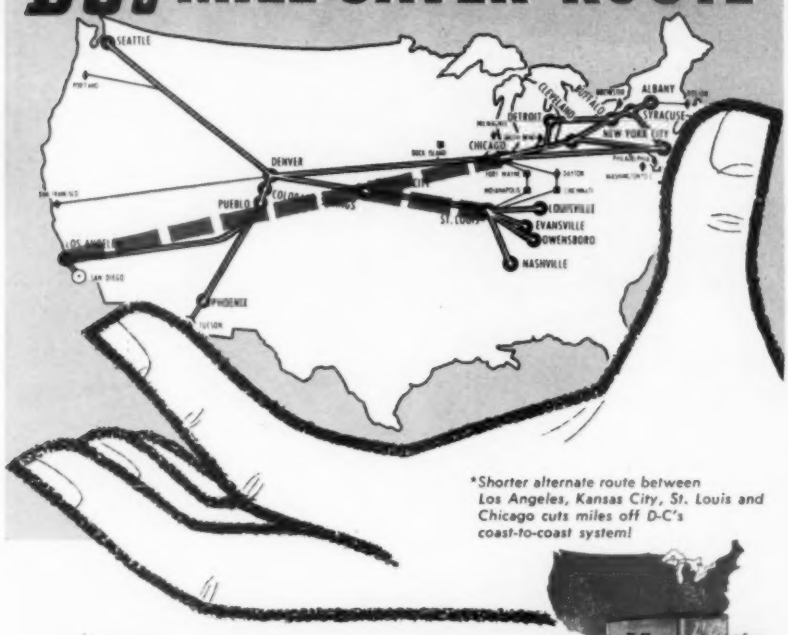

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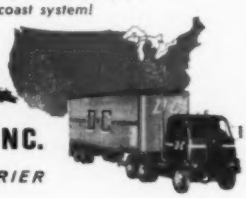

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Number of Advertisers Business Week carried over 200 *more* advertisers than any other general-business or news magazine.

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from now on, some of the smaller ships will survive. All Canadian shipping companies agree that there will be a continuing need for a group of smaller ships between 5,000 tons and 15,000 tons (bigger than the old canallers, but smaller than the big bulk carriers). In many cases, these are "jumboized" canallers or new ships built in the last three to five years.

Their job will be serving the hundreds of small and relatively isolated communities and industries (chiefly pulp and paper companies) that dot the long, lonely shores of the Canadian side of the lakes. Rail service for these areas is either too expensive or unavailable. Yet their needs are not great enough nor are their harbors deep enough to be served by big bulk carriers. So they must rely on smaller lake boats for their foodstuffs, fuel and lubricant oils, and manufactured goods.

The two best examples of these smaller lake boats that will still do a brisk trade are lake tankers and "package freighters." Many of the lake tankers once were owned by Canadian oil companies, but were sold to operators in Montreal who lease them back to the oil companies for small bulk deliveries.

• **Package Service**—"Package freighters" are operated only by Canada Steamship Lines, which designed and built the ships in its own yards. They carry about 3% to 5% of the total cargo moved on the lakes.

The package freighter is a vessel of about 8,000 tons, but has none of the traditional kingposts or masts of most dry cargo ships. Instead, its sides are fitted with huge doors through which packaged goods are moved from the warehouse by fork-lift trucks that drive the cargo into the ship's hold.

• **Ocean Coasters**—Hall Corp., a Montreal shipping company, has found another use for the smaller ships. It has modified 10 of its old canallers for the deep sea and coastwise trade to Newfoundland.

And CSL has announced that it will put one of its medium-sized bulk carriers into service between Quebec City and British ports. The ship already has been used in the Arctic.

Today's big bulk carriers cannot move out into the ocean because the long, low, narrow boats would break in two in the long slow ocean swells of the North Atlantic. But ship design changes are now under study. And it probably won't be too long before the big lake boats will plow into the sea to serve ocean ports adjacent to the Seaway system. This is the next logical step, since the Seaway already has proved that the longest possible haul for the bulk carriers is the cheapest possible haul. **END**

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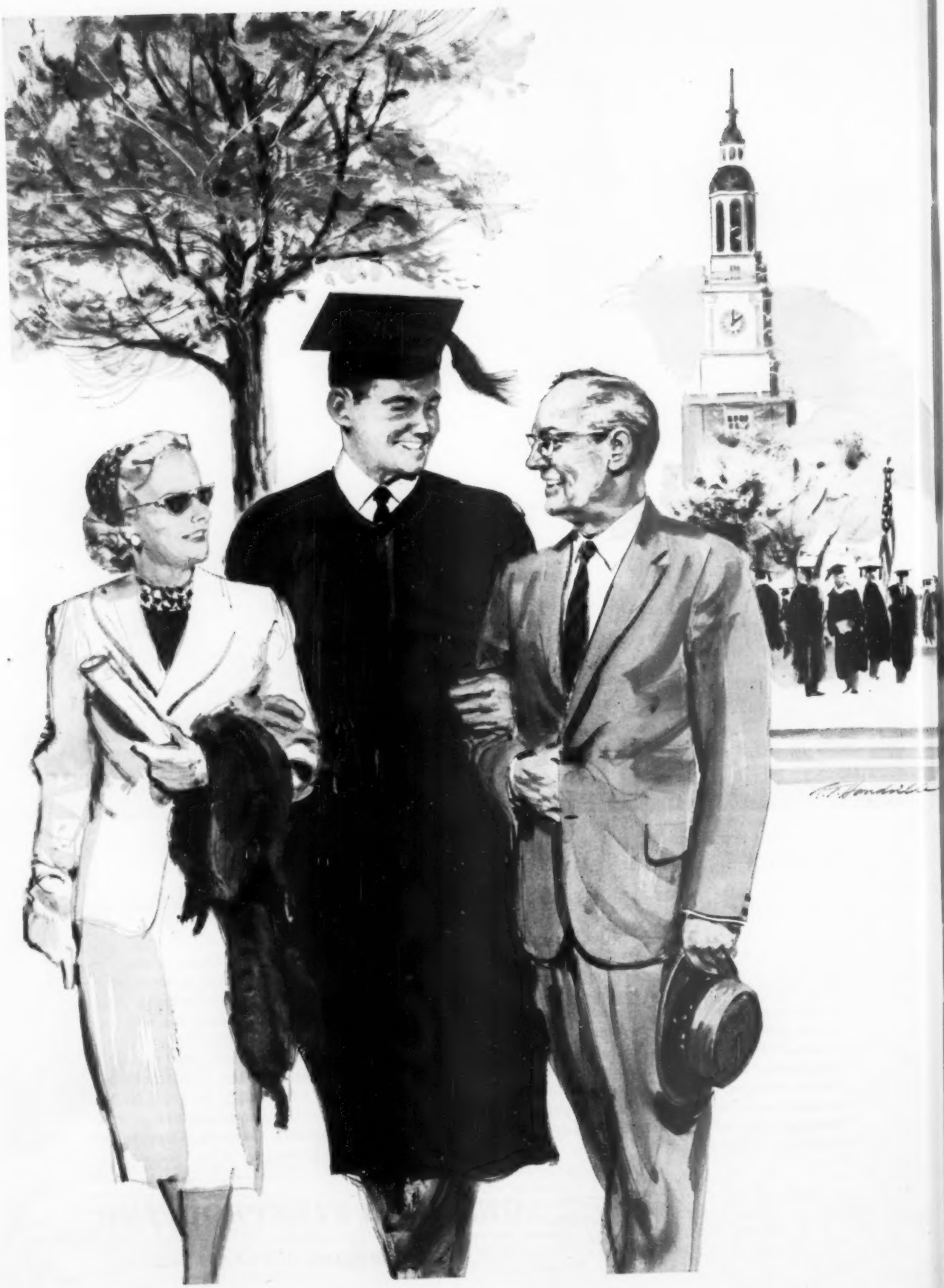

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"William C. Schall, Assistant Editor," shines new and bright on Chemical Engineering's contents page. We think you'd like to know him better because he's a typical example of McGraw-Hill's editorial training at work.

Bill was discovered about a year ago at Carnegie Tech by a member of our Editorial Director's staff. He was an older "young man," back earning his B. S. in Chemical Engineering after a hitch in the artillery. He also edited "The Carnegie Technical," worked one summer as an editor with a professional engineering society.

Bill showed so much promise that he was asked to submit an autobiography. Next step: a special assignment to test his writing talent. Then, a series of screening interviews by senior McGraw-Hill editors. Successful, he moved on to six months of actual on-the-magazine editorial training. Along with it, he participated in classes in writing, publication production, workshop groups. Finally—a regular editorial berth on Chemical Engineering.

Bill Schall, as we said above, is a typical example of our editorial training at work. Other young men from the class of '58, whose careers parallel Bill's, include: George Finnegan, B.A., Oberlin and M.B.A., New York University, now Assistant Marketing Editor, Business Week . . . Jim Bower, B.A., Journalism, Texas A & M, now Assistant Editor, Petroleum Week . . . Joel Roth, B.S., Civil Engineering, Case Institute of Technology, now with Engineering News-Record . . . Jack Hess, B.A., M.A., English, University of Iowa, now Assistant Editor, Fleet Owner.

Out of a thousand college graduates, let's say, we're shooting for one "Bill Schall." And such pains in the selection and training of our editors carry over to the printed page . . . adding another reason why more than a million key men in business and industry pay to read McGraw-Hill publications.

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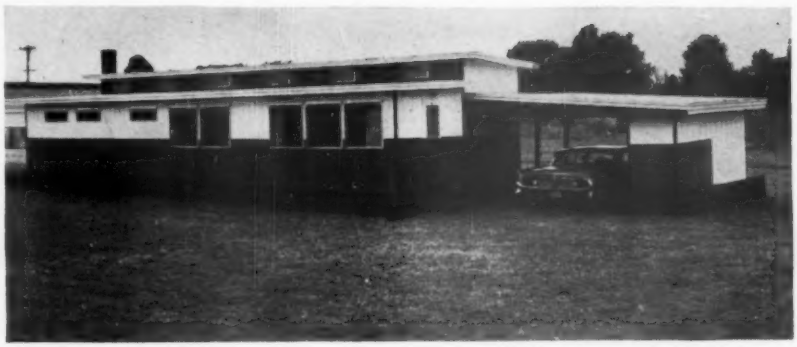

Mobile Home Puts Down Roots

A large proportion of mobile homes—the industry euphemism for house trailers—never get trailed; they are stuck in one spot as permanent living quarters. So mobile-home builder Har-Mac, Inc. of Stratford, Wis., reasons that there must be a market for mobile homes that behave more like houses than trailers.

The company has designed a line of Presto-Homes, prefabricated and prefurnished houses with mobile features that allow them to be easily disassembled and moved, but with an appearance that belies their mobility.

The new homes are transported by truck and can be assembled by three men in one day.

The units are 64½ by 22½ feet and include a car-port. The homes have a living room 13 x 20 ft., a kitchen-dining room 10 x 20 ft., two 13 x 20 ft. bedrooms, a children's room, and a complete bathroom. Pylons supporting the car-port roof provide storage space.

The design is modern, featuring a cathedral type ceiling with studio windows and an exterior of stained redwood and conventional siding. The units retail at about $14,000 complete with all the furnishings.

Offset Printing Speeded Up

Two companies have come up with new ways to speed photographic preparation of offset printing plates. Gevaert Photo-Production N. V. of Belgium uses a new type of aluminum plate, and Eastman Kodak Co. uses a new kind of paper negative with an ordinary paper master.

• **Master Plates**—Offset duplicating machines resemble miniature, lightweight printing presses that economically produce thousands of comparatively high-quality copies from a master plate. It's called offset because the inked image is "offset" from the master to a rubber roller, which then imprints it on paper sheets.

Often the copy is typed directly on paper or paper thin aluminum masters. But when a letter, a drawing, or other elaborate material is to be copied, the plate is made photographically.

Making a master this way often takes 45 minutes or longer. Previous attempts to speed up the process have usually involved making the master on office copiers, but these often make less satisfactory images.

• **Much Faster**—Gevaert, however, cuts the time to one minute without losing quality, in making plates that are optically reduced or enlarged from the original. The paper negative is exposed to the original in standard camera equipment. The unexposed photographic salts are transferred to the aluminum master in a special unit resembling a photocopy processor (BW—Sep. 19'59,p90), producing the image. The master is then swabbed with a fixer to hold the image. The aluminum plate has a treated grain so it will accept the image; light won't hurt it but dropping will. The Gevaert plate will make 10,000 copies or more.

The Kodak system is quite similar, though it uses different chemicals, a conventional paper master instead of aluminum, and is rated at 1,000 to 2,000 copies from a single master. It has the additional advantage that the paper negative—called Ektalith transfer paper—can be used to make up to 10 conventional photo-copies instead of an offset master.

The Gevaert Co. of America, New York, will sell the Belgian equipment here. The processing unit will cost about $150, and the paper negative and aluminum plate 59¢ a pair. Kodak processing units are priced from $500 to $875, negative paper costs 14¢ to 30¢.

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Sensing Device Detects Infinitesimal Movement

In ultra-sensitive control instruments, it's often difficult to measure minute physical motions. Just the act of taking the measurement can disturb the system enough to cause an incorrect report. And the findings frequently have to be amplified electronically. Besides, most ultra-sensitive measuring tools are easily damaged and have to be specially designed for each application.

These vices are conquered in the Metrisite, a new general-purpose sensing device made by the Brush Instrument Div. of Clevite Corp., Cleveland. It can detect movements as tiny as 1/10,000,000 in. as easily as a 4-in. wobble. Properly adapted, it can measure pressure, flow rates, temperature, and fluid viscosity and density in addition to linear and angular movement. It's ordinarily fist-sized, but it can be scaled down or up if needed. Simple construction makes the device extremely rugged.

• **Like a Phonograph**—The Metrisite operates on the transducer principle—changing physical movements to electrical signals. A phonograph needle and cartridge behave much this way: The needle's up-and-down movements over the tiny undulations in the record groove are turned into electrical pulses, which then have to be amplified into a strong signal. But here the resemblance ends. The Metrisite puts out such a high, stable signal—up to 100 v.—that no amplification is needed to secure satisfactory results.

However, the transducer principle assures that even the most microscopic of movements won't go undetected. In the Metrisite, the transducer pickup is a small, nonmagnetic copper armature bobbing in an air gap between two balanced magnetic fields. If even the vaguest nudge on the armature knocks the fields out of plumb, the voltage changes between the two coils creating the fields, and this difference in voltage generates an electrical signal. This signal in turn is picked up by a meter and indicated visually or fed back into a control system to correct the movement.

• **Civilian Use**—The instrument's extreme sensitivity, durability, and resistance to high temperatures and moisture suit it particularly well for precise jobs in missiles and aircraft. But it has nonmilitary applications, too. In machine tools the Metrisite is used by Federal Products Corp., Providence, R. I., in its Electroprobe, which checks the position of tools and fixtures.

Metrisite devices cost from $50 to $500, depending on size and accuracy of the model. **END**

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THE TREND

Time Runs Out in the Steel Strike

After exhausting every possibility of arranging a voluntary settlement, the Eisenhower Administration reluctantly has asked for a Taft-Hartley injunction to get the steel mills back at work.

This injunction—the first in the troubled history of labor relations in the steel industry—was something that no one wanted. The Administration, desperately anxious to see the strike settled by true collective bargaining, waited until the mounting threat of a national emergency gave it no choice.

The Issues

The stalemate that the President's fact-finding board reported last weekend is doubly disappointing because at the end the two sides seem to have been coming closer together. A week of hearings and behind-the-scenes mediation by the board and its chairman, Dr. George W. Taylor, had gone a long way toward closing the gap that originally separated the negotiators.

On economic issues, both management and labor had given some ground. And, perhaps even more important, management had made a concession on the crucial issue of work rules. It had offered to submit the whole subject to arbitration.

From the beginning, the industry's insistence on changing the work rules—the so-called 2(b) clause—has been one of the biggest barriers to a settlement. Management's offer to let an arbitration board deal with it is all the more important because—whatever the reasons may be—the industry has failed through most of the strike to make its case to the general public. It has given an impression of stiff-necked stubbornness, of unwillingness to concede even the smallest point. Now, by yielding on this central point, it has retrieved much of the sympathy it had lost. And the union by refusing even to consider the arbitration offer has put itself in the position of being unwilling to bargain.

What Now?

Under the circumstances, the injunction stands as a monument to the triumph of human stubbornness over common sense. And until the stubbornness abates, the situation in steel will be a continuing threat to the whole economy.

It is clear to everyone that the reopening of the mills under Taft-Hartley is no real solution of the problem. It is only a stopgap measure, and a thoroughly unsatisfactory one at that. For the 80 days that the injunction runs, the economy will have to operate with the prospect of another shutdown staring it in the face. There will be a scramble for steel among the industry's customers. There will be lost production and inefficiency in the plants. And beyond all that, there will be mounting pressure, both in government and in the country as a whole, to find some drastic way of dealing with strikes that close down basic industries.

If Congress comes back in January to find the steel industry closed down again or on the point of closing down, there literally is no telling what sort of legislation it may adopt in a frantic effort to break the deadlock between management and labor. Already there is talk, even in fairly moderate quarters, about the necessity of setting up machinery for some sort of compulsory arbitration.

It is no exaggeration to say that any such panicky legislation might well set labor relations in this country back a whole generation. Both management and labor stand to lose by any step that leads away from voluntary collective bargaining. So, for that matter, does the whole country. For the basic proposition of U. S. democracy is that reasonable men can settle their conflicts by reasonable means. To deny that proposition is to embark on an endless journey into government regulation.

This sobering thought should be uppermost in the minds of both sides as the mills reopen under the injunction. Invoking Taft-Hartley does not end the obligation of management and labor to bargain in good faith toward a settlement. If anything, it increases that responsibility—because beyond Taft-Hartley there is nothing but the breakdown of the whole structure of labor-management relations that has been built up in this country in the past 30 years.

The progress that was made last week—even though it was not enough to produce a settlement—offers some hope for the days ahead. Clearly, the mediation efforts that Dr. Taylor and his board undertook were well worth while. They did succeed in shaking negotiations off dead center.

It is possible that with skillful mediation during the injunction period, the industry and the union may be able to produce a voluntary agreement before the 80 days have run. But it will be possible only if both sides take a realistic look at the temper of the country and conduct themselves accordingly.

This is no time for management to make up its mind that it is going to teach labor a lesson. And it is no time for labor to demonstrate its power at the expense not only of management but of the whole country.

It is a time for both parties to buckle down to the job of working out a real solution of their differences. And it may be the last time that they will have such a chance. If this thought is not enough to spur them into renewed efforts to reach a voluntary agreement, then the outlook not only for steel but for all of us is not a very encouraging one.

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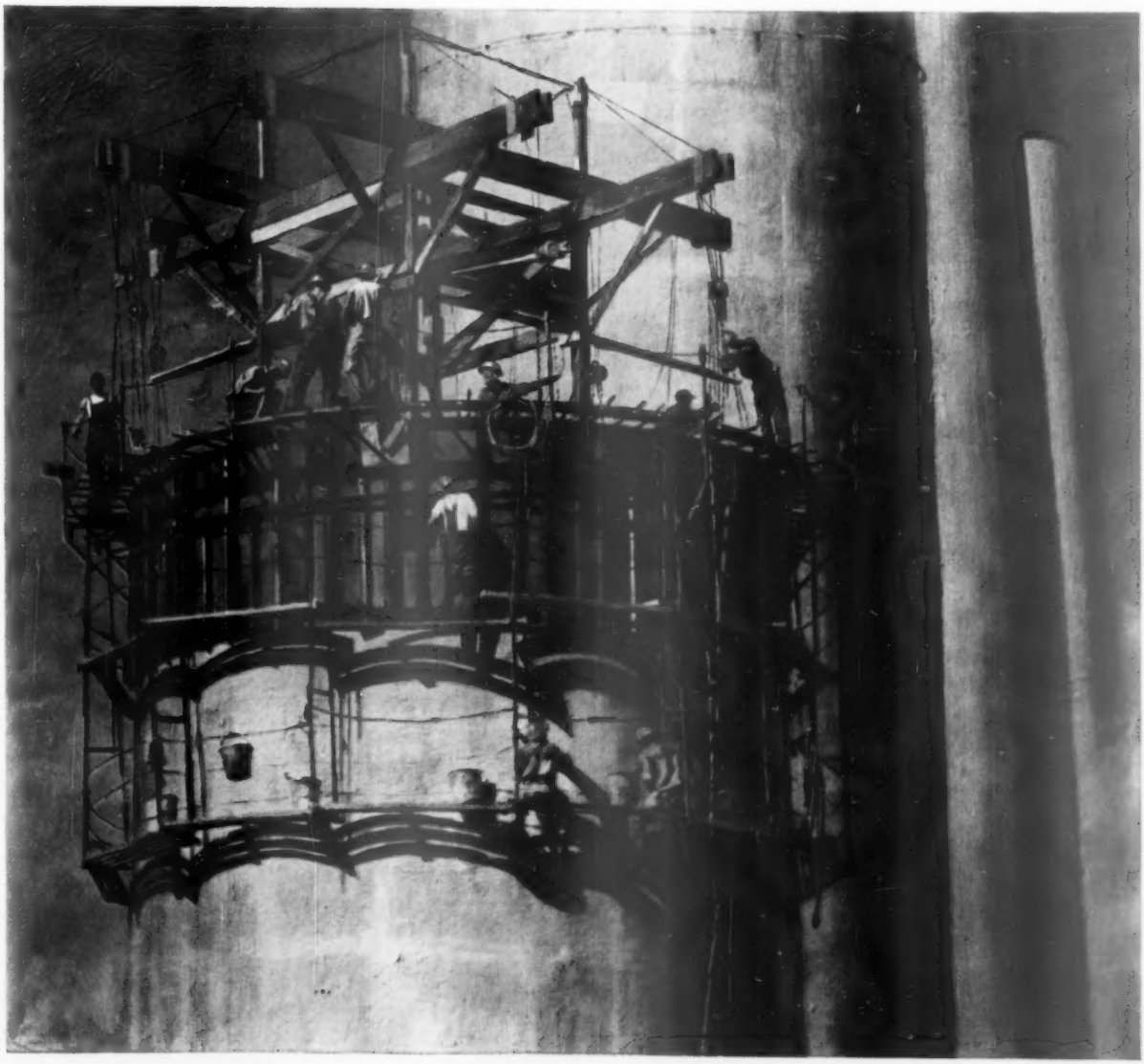

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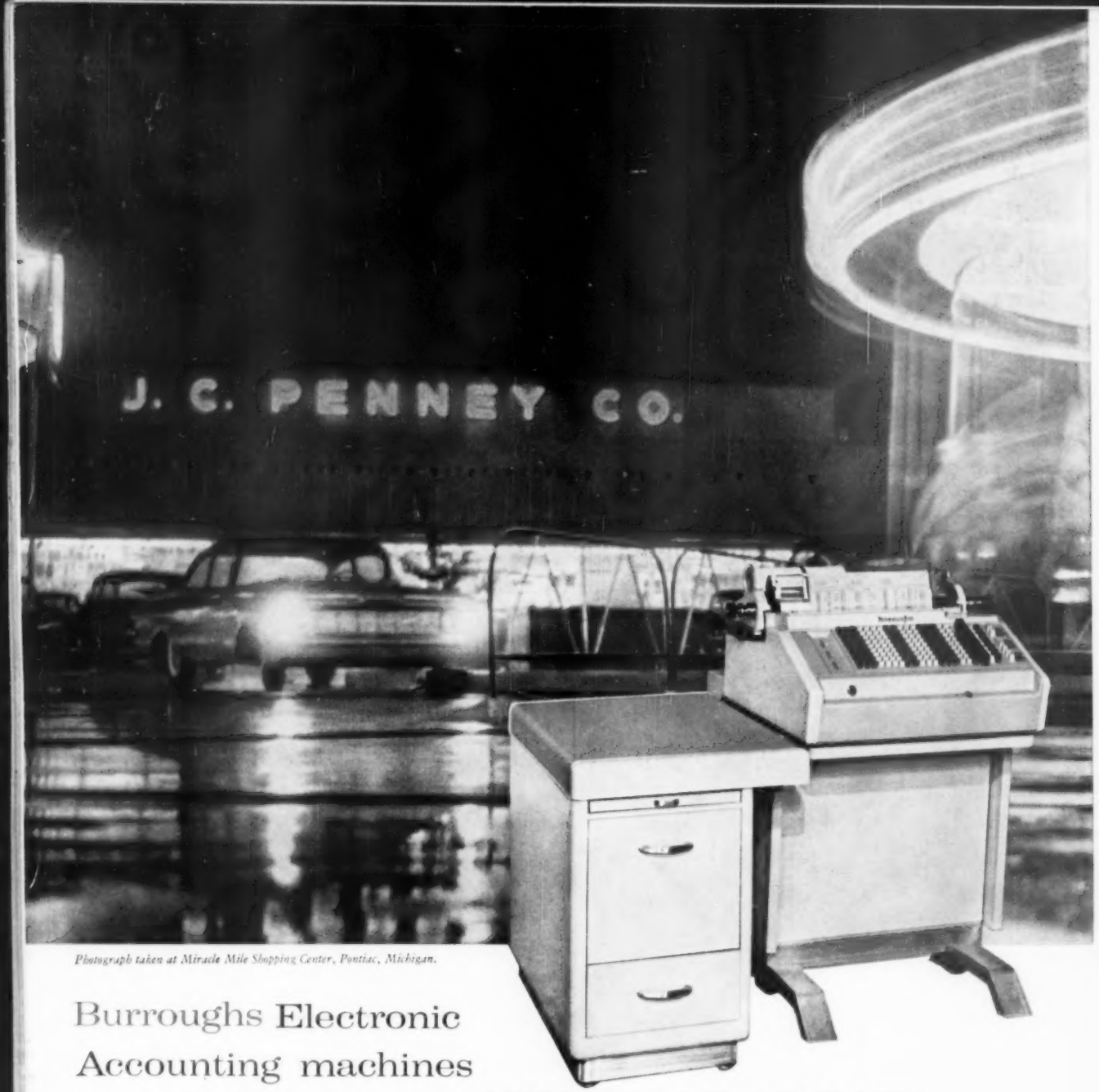

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